DOCUMENT RESUME

ED 346 789 HE 025 607

AUTHOR	Reithlingshoefer, Sally J., Ed.
TITLE	The Future of Nontraditional/Interdisciplinary Programs: Margin or Mainstream? Selected Papers from the Annual Conference on Nontraditional and Interdisciplinary Programs (10th, Virginia Beach, Virginia, May 10-13, 1992).
INSTITUTION	George Mason Univ., Fairfax, Va.
PUB DATE	May 92
NOTE	763p.
PUB TYPE	Collected Works - Conference Proceedings (021)
EDRS PRICE	MF04/PC31 Plus Postage.
DESCRIPTORS	College Instruction; Community Development; Cultural Influences; Educational Assessment; Educational Technology; Extension Education; *Higher Education; Institutional Cooperation; Instructional Effectiveness; *Interdisciplinary Approach; Learning; Liberal Arts; *Nontraditional Education; Politics of Education; School Business Relationship; Special Needs Students
IDENTIFIERS	Cazenovia College NY; Fairleigh Dickinson University NJ; Lewis Clark State College ID; Lynchburg College VA; State University of New York

ABSTRACT

This volume presents the proceedings of a conference on higher education non-traditional and interdisciplinary programs. The papers are grouped into 13 categories. The categories, together with some of the topics treated by the papers grouped within them, are as follows: (1) "Assessing Experiential Learning" (integration into a traditional four-year institution, new directions, new collaborations, 10 years of portfolio program assessment at Lewis and Clark State College, Fairleigh Dickinson University's portfolio process, assessment standards); (2) "Changing the Culture of Teaching and Learning" (student self-assessment; the political geography of higher education; cultures for emancipatory curricula; Lynchburg College, Virginia; an evolving write to learn program); (3) "Creating Learning Communities" (coping with change, faculty reward systems, collaboration, adult learners, Marist College Cluster, teaching in prison); (4) "Decentering the Teaching Process" (client-centered courses, student directed learning, and team learning); (5) "Defining Ways of Knowing" (intuition, the culture of knowing, reconciliation, the liberal arts); (6) "Developing Effective Teaching Techniques in Interdisciplinary Programs" (connections across disciplines, analyzing student evaluations, teaching debate and the canon, secular study of religion, team teaching, interdisciplinary study through the modern novel, problem based learning, the Dyad Seminar, learning journals); (7) "Developing New Methods, Models and Markets" (graduate study, critical thinking, advanced writing, textual studies, nontraditional doctorate, pre-service teachers course, adult education market, human cognition and predispositions, adaptive behavior); (8) "Integrating the Arts and Sciences" (arts and sciences and the visual arts, history, drawing, integrating creative writing and science in the classroom); (9) "Linking Technology with Nontraditional/Interdisciplinary Education" (creating learning communities, distance graduate education, videotaping, interstate authorization of distance education, State University of New York via satellite, assessment, a quantitative reasoning course); (10) "Meeting the Needs of Special Constituencies" (politics of education, effective management education, assessment, the weekend format, learning spirals, returning women, preparing non-access adults for middle class jobs, adult learners, critical thinking, Cambridge College, educational opportunities, assisting inner-city families); (11) "Providing Quality Programs Off Campus" (humanities programs, program "how to" , models); (12) "Serving Corporate Needs Through Partnership Models" (program models, follow-up analysis, prior learning assessment); and (13) "Understanding the Politics of Nontraditional/Interdisciplinary Education" (home economics, student service, gaining support for nontraditional programs, an analytic framework, Cazenovia College, New York). References follow many of the papers. (JB)

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10th

Annual Conference

Nontraditional/Interdisciplinary Programs
Virginia Beach, Virginia
May 10-13, 1992

Proceedings

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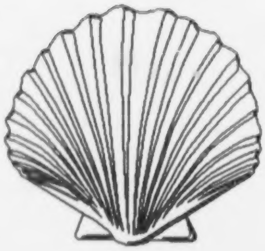

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THE FUTURE OF NONTRADITIONAL/INTERDISCIPLINARY PROGRAMS: MARGIN OR MAINSTREAM?

SELECTED PAPERS FROM THE TENTH ANNUAL CONFERENCE ON NONTRADITIONAL AND INTERDISCIPLINARY PROGRAMS

Edited by:

Sally J. Reithlingshoefer

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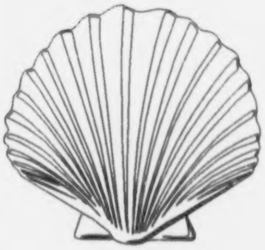

May 10-13, 1992
Holiday Inn
3900 Atlantic Avenue
Virginia Beach, Virginia

PREFACE AND ACKNOWLEDGMENTS

This year is the tenth anniversary of a conference which began as a "one-shot experiment." Those of us who were involved in planning the first conference believed that people teaching in nontraditional/interdisciplinary programs lacked sufficient opportunities to present and publish their research and to share their experiences with colleagues in what we considered to be one of the most exciting areas on the frontiers of higher education.

The response of the participants at that first conference was gratifying, and we decided to make it an annual event. It has been fascinating to observe the changes in the issues of nontraditional and interdisciplinary education as what was once considered nontraditional has become mainstreamed in most of our institutions. There is no given time in which most colleges and universities are not tinkering with their curricula, and we have seen those changes reflected in the paper presentations. As technology expands and users become more sophisticated, we continue to see dramatic changes in subject matter as well as presentation format.

As those of you who are involved in conference planning know, conferences do not just "happen." The blood, sweat, and tears of many people over the past decade have contributed to the success of this conference, and I would like to acknowledge especially the contributions of several individuals. Foremost is Bob Hawkes, the former dean of the School of Continuing and Alternative Learning, who had enough confidence in me to let me shape this conference exactly as I wanted it. Next, my former colleagues Jim Fonseca, Kathleen McGuinness, and Jim Sanford, all of whom at one time headed the Office of Individualized Study Degree Programs, and former assistant dean Randy Lytton, whose assistance in the academic planning of the conference has been invaluable. Distinguished Professor Arthur Chickering has been a wonderful source of energy, assistance, and ideas for the conference and has generously donated his time to help make the conference successful. Featured speakers such as George Keller, George Pruitt, Rusty Garth, Janice Green, Harry Downs, Jim Rodgers, Art Chickering, Betty Siegel, Billy Wireman, Jack Lindquist, Tom Clark, Ron Gross, Sam Brightman, Senator Claiborne Pell, Richard Lapchick, Norbert Hruby, Lee Knefelkamp, Bonaro Overstreet, Herman Blake, Ray Wlodkowski, Art Levine, Russ Edgerton, Nancy Wilgenbusch, Patricia Plante, and many others have sparked the interest of our participants, and for their help I am truly grateful. The help of an excellent Conferences and Institutes staff has been essential, and thanks go to Nancy Joyner, Carole Thudium, Barbara Framer, Kitty McIntyre, Lydia Walls, Susan Quirk, and especially to Kitty Hoover who has been my right-hand person. Several secretaries who have worked on the conference over the years have built upon each other's experience and refined our systems. I would like to thank Louise Levinson, Eloise Carpenter, Beth Grohnke, Dixie Piper, and particularly Judy Pierce for their contributions.

My most important note of thanks goes to those of you who have gathered together as participants in this conference to share your ideas. George Mason University hopes to be able to continue to provide a forum which will stimulate and improve interdisciplinary research and teaching, and we hope to continue to promote the idea that learning is not only a lifelong process but a lot of fun.

Sally J. Reithlingshoefer

Sally J. Reithlingshoefer
Associate Vice President for
Administration and
Professional Development

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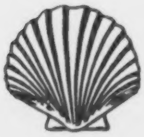
ASSESSING EXPERIENTIAL LEARNING



INTEGRATING PRIOR LEARNING ASSESSMENT INTO A TRADITIONAL 4-YEAR INSTITUTION

Deanna Boe

The Institute for Professional Development recently surveyed member institutions of the Consortium for the Advancement of Adult Higher Education (CAAHE) to collect data on their adult degree programs' academic/admissions/assessment policies. This presentation will give an overview of survey results and discuss some of the issues CAAHE colleges and universities have dealt with when integrating a degree completion program that includes assessment of prior learning into a traditional institution.

Introduction

Prior to the 1960's the assessment of college level learning which was acquired in nontraditional settings was often considered the "stepchild" of traditional education. Since that time, prior learning assessment has become an academic process recognized by educational institutions, by accrediting agencies, and perhaps most importantly, by the experienced adults who are returning to college in vast numbers.

David Kolb (1976) points that many of us erroneously bought the idea that learning ends and living begins when we graduate from college. Actually, our instinctive drive to learn begins at birth and continues throughout our lives. The classroom may not be the real world; but the real world often is a "classroom."

The institution that provides for assessment of prior learning is endorsing the concept that legitimate college-level learning can occur outside the traditional classroom and result in transferable knowledge and skills. Working adults pursue learning in a variety of environments (Kolb, 1976); the assessment process validates both the learning and the learning environment and thus strengthens and expands

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Deanna Boe, Director of Prior Learning Assessment, Institute for Professional Development, Phoenix, AZ

the mission of the college to include better serving adult students, the communities in which they live, and the organizations for which they work.

It is important that assessment of prior learning be part of an adult program, but it is equally important that high standards be maintained in order to protect the integrity of the process. To this end, The Council for Adult and Experiential Learning (CAEL) has led the way in promoting standards, principles and procedures for the assessment of prior learning. CAEL's five academic standards are: (a) credit should be awarded only for learning, and not for experience; (b) college credit should be awarded only for college-level learning; (c) credit should be awarded only for learning that has a balance, appropriate to the subject, between theory and practical application; (d) the determination of competence levels and of credit awards must be made by appropriate subject matter and academic experts; and (e) credit should be appropriate to the academic context in which it is accepted (Whitaker, 1989).

In a well-designed and well-administered program, the burden of proof of learning is still on the student and the burden of maintaining high academic standards is still on the faculty (Hruby, 1980). As long as faculty retain control of student evaluation, abuse of this process is not a real threat.

Background

The Consortium for the Advancement of Adult Higher Education (CAAHE) is a nonprofit, self-supporting organization of institutions committed to meeting the lifelong learning needs of adult students through innovative approaches to higher education. All of the CAAHE member colleges have developed undergraduate degree programs for working adults that offer prior learning assessment as an alternative method for students to earn credits that can be applied toward degree requirements.

The Institute for Professional Development (IPD) is a higher education development and management corporation that has assisted accredited private colleges and universities in the development of academic degree programs designed to meet the educational needs of working adults since 1973. IPD contracts with the institution to develop an adult degree program that meet its goals and mission while providing start-up capital and services such as program promotion, student recruitment and management training. All CAAHE institutions are IPD clients.

IPD surveyed members of CAAHE to collect data on adult program governance and policy formation, program administrative structure, admissions and transfer credit requirements, liberal arts requirements, and prior learning assessment programs.

The purpose of the study was to document and describe adult degree institutional policies for the consortium and to share information with leaders of CAEL, the organization that has set the standards for quality assurance in assessment of prior learning.

Methodology

In September of 1991 a questionnaire was sent to all directors of the admissions and assessment process at CAAHE institutions; after reviewing the completed surveys, follow-up telephone interviews were conducted with respondents. The survey was further augmented by on-site audits of each institution's assessment program (with the exception of the University of Phoenix) which were conducted by the researcher during 1991. The instruments used in the study and audit were designed by the researcher, who also worked with each institution in the initial phase of admissions and assessment policy development.

A narrative and matrix of information were prepared which summarized the findings of the study. The final product was then reviewed for accuracy by appropriate representatives from each institution. Nine institutions participated in the study--Averett College, Virginia; Baker University, Kansas; Cardinal Stritch College, Wisconsin; Central Wesleyan College, South Carolina; Indiana Wesleyan University, Indiana; LeTourneau University, Texas; Olivet Nazarene University, Illinois; Eastern Nazarene College, Massachusetts; University of Phoenix, Arizona. One member, Fontbonne University, Missouri, was omitted from the study because it recently joined the consortium.

Findings

Adult Program Governance

Each CAAHE member institution has established a governance system which oversees its adult degree programs and makes all decisions concerning curriculum, programs, and academic/admissions/assessment policy formation. The governance committees vary in composition but in general include division chairs, faculty and the deans or directors of the adult degree program. Policies concerning program admissions and prior learning assessment are formulated and approved by the governance committees only after extensive research and review of common practices at other similar institutions and AACRO/ACE/CAEL guidelines where applicable.

Faculty Involvement

At CAAHE institutions faculty are involved in the adult program at the outset--they vote on and approve the program; they design, review, and revise the core curriculum; and they serve on committees that develop and approve all academic policies related to the program.

Admissions Process

At four CAAHE institutions (Indiana Wesleyan University, Central Wesleyan College, Eastern Nazarene College and Baker University) the directors of assessment (who are employees of the college) have also been designated to function as registrar for the adult program and work in conjunction with the campus registrar. At IWU and CWC the institutional office of student records posts grades and sends out transcripts; all other functions are handled by staff assigned to the adult degree program. At Baker and ENC, the adult program's academic records office handles all recordkeeping functions for the adult students and the main campus registrar's office serves as a liaison on policy making issues. At the remainder of the schools, admissions and registration functions for the adult program are handled by the institutional office of the registrar.

At most of the schools, admission criteria for the adult program vary slightly from requirements for traditional programs. Some have a minimum age requirement of 23-25 years; all require at least two years of significant work experience, two or more letters of recommendation, a minimum GPA, and a minimum number of transcripted credits from a regionally accredited college or university to begin the core curriculum of a bachelor's program, ranging from 20 to 60.

Generally, degree completion requirements differ from the residential programs in that fewer general education credits are required and more electives can be part of the degree, although the total number of credits required for graduation is the same. General education credit requirements range from 30 semester hours at Indiana Wesleyan and LeTourneau to a minimum of 43 at ENC. At a few institutions, competency in writing, reading and/or math must also be established prior to entry into the adult program.

Prior Learning Assessment Model

All of the CAAHE members' assessment programs are based on a model developed by the Institute for Professional Development (IPD) which in turn is based on research, development and refinement of a process anchored in CAEL standards.

The model includes a centralized assessment center, which may stand alone or be part of student services; a center director who is a full-time college employee and is responsible for the overall quality of the prior learning assessment program; pre-assessment counseling for all students; a portfolio development course; and a standardized assessment process which is institutionally based and governed. Prior learning assessment policies follow regional accrediting association guidelines, CAEL and American Council of Education (ACE) guidelines; and are based on CAEL and ACE national surveys of educational institutions, and IPD surveys of non-CAAHE accredited four-year institutions with adult programs that include assessment of prior learning.

Each institution adapts the model to fit its unique needs and mission. All of the CAAHE member institutions that have had regional accreditation reviews after implementation of the adult degree program have received positive review of their prior learning assessment programs.

All the institutions are using the same categories of non-traditional credit and methods of assessment. These categories are: national standardized proficiency exams such as CLEPs and PEPs; ACE recommendations for military training and ACE/PONSI recommendations for professional training; professional course work that has not been evaluated by ACE or PONSI; licenses and certificates that establish professional competencies; and prior learning gained from life and work experience. (ENC does not assess the latter category.) There are variations from institution to institution in whether categories of non-traditional credit are transferred in directly or assessed through a portfolio. I refer you to the matrix in Appendix C of the "CAAHE Summary of Member Institutions Prior Learning Assessment Policy and Procedures."

Prior Learning Assessment

The number of adult students choosing portfolio assessment as an option at CAAHE institutions ranges from 2% to 25%. A number of factors may be involved in the relatively low number of students at most of the schools who choose the portfolio as an option. Schools with a high number of general education credit requirements, for example, have very few students electing to petition for credit through the portfolio because students seldom have experiential learning in these subject areas. Taking a course or CLEP to fulfill a liberal arts requirement in such a case is more appropriate, and students are counselled accordingly. Schools that offer supplemental courses in either general education or elective areas also have fewer students utilizing the portfolio option. Most students seem to prefer taking a course to preparing a portfolio. Adult students may see assessment of prior learning as a time-consuming and risky process.

Issue #1: Should the institution limit portfolio assessment to full-time faculty?

Portfolio assessors at all member institutions must possess a graduate degree and experience in the field they are evaluating. At some, only regular faculty who currently teach in the discipline or a related discipline may evaluate. At several, adjunct faculty are included in the pool of trained assessors. Some contract with an outside expert in the field when appropriate expertise is not available on campus. Often, faculty at nearby accredited two- and four-year institutions are selected for these unusual cases.

CAEL has consistently stressed two things related to portfolio evaluator qualifications--subject area expertise and training that covers the assessment process. Whitaker (1989, p. 91) identifies as a misconception that "only full-time faculty on regular appointments are qualified to determine credit awards for experiential learning." He also states that:

> assessors can be subject matter experts, assessment experts, or faculty concerned with generic competencies not associated with a particular discipline. They may or may not include individuals outside the institution. The role of outside experts, however, should be confined to judgments concerning knowledge and competence levels attained. The determinations of credit awards must be made by faculty members of the institution awarding the credit. Policies regarding choice of assessors should reflect the nature of the program and the types of learning involved (1989, p. 80).

In other words, CAEL approves the use of outside consultants in cases where their expertise is required as long as the final award of credit is made by a faculty member.

Issue #2: Should the institution place a limit on the amount of credit a student can earn through portfolio assessment?

With one exception, the schools place a limit on the amount of credit a student may earn through portfolio assessment--limits range from 30 to 60 credits. At all the schools the average number of credits earned through assessment is significantly lower than the stated limits because of institutional standards and policies. Average credits range from 8 at Averett College to 11-15 at the University of Phoenix.

CAEL standards do not specifically include placing credit limits on prior learning assessment. Instead, Whitaker implies that if CAEL's five academic standards are followed, the process will be self-limiting.

Issue #3: Should awards of credit for prior learning be limited to subject areas which fall within the curricula taught at the institution?

Due to new accreditation criteria adopted by SACS in February of this year, CAAHE member institutions with SACS accreditation must now limit awards of credit for extrainstitutional learning to subject areas which fall within the curricula taught at the institution. The other CAAHE institutions allow students to petition for credit in any subject area that is offered at a regionally accredited institution if the expertise is available to assess it. With a few exceptions, CAAHE institutions are small liberal arts colleges with course offerings in a limited number of disciplines.

Whitaker (1989, p. 91) identifies as a misconception the idea that "prior learning credit should be granted only when its content corresponds to that of courses listed in the catalog." He states that it implies a "double standard" by denying credit for prior learning when credit is regularly granted for subject areas not taught at the institution when it is transfer credit from other institutions, independent studies and the like.

Issue #4: Should the institution provide individual or group counseling for entering students? At what point in the application or admission process should counseling on prior learning assessment occur?

CAAHE institutions all recognize the importance of providing early counseling and advising for the adult student--many of whom have not been in a college classroom for years and experience some initial anxiety. The more information that is made available to students, the more informed their decisions will be, and ultimately, the more satisfied they will be with the program. The counseling process effectively encourages qualified applicants to enroll through the elimination of questions and fears, while directing those who do not yet qualify toward the design of a plan to earn credits to become eligible.

At most of the institutions, counseling of students takes place prior to formal admission to the program. The counseling is performed by full-time college staff and usually includes a group presentation on portfolio development that is followed by individual counseling and discussion of the various options available to students to complete degree requirements. Handouts accompanying the presentation include a handbook on portfolio development and a variety of materials related to other options, including CLEPs and PEPs, regionally accredited correspondence courses, supplemental curriculum at that institution, and telecourses and weekend courses at nearby regionally accredited institutions.

Because students are allowed to begin the program with credit deficiencies, some will not have met all degree requirements when they complete the core curriculum. For this reason, several schools also require students to develop and write a degree completion plan which must be approved and signed by the administrator in charge of admissions and assessment. Students are often not ready to design a plan prior to enrollment or during the early weeks of the program so most of the schools using the degree completion plan have built in some flexibility that allows students to alter their plans during the program.

Some schools who tried group counseling during a seminar found it to be ineffective because of time constraints and returned to individual counseling. Others have continued group counseling and have trained three or four staffers to counsel students on portfolio assessment and aid them in designing a degree completion plan. Additional guidance is provided by the director of prior learning assessment or a staff member after the session if it is requested by the student.

Issue #5: Should the institution offer a for-credit portfolio development course?

Five of the institutions offer a for-credit portfolio development course. These courses vary widely in format and content. At Central Wesleyan, portfolio development has been incorporated into a communications course designed by English department faculty through which students can earn three credits in English composition. At Indiana Wesleyan the course focuses on personal and professional assessment techniques; at Cardinal Stritch, on career management. At some schools the course has been discontinued for a number of reasons and portfolio development is aided by a seminar or individual counseling and a student guide.

The portfolio development course is a valuable service the institution can provide for students. Students need special guidance in the preparation of experiential learning essays. When the course is not in place, the college ends up providing the guidance through other means--assessment center staff or faculty. Although a formal study has not been undertaken, prior learning assessment administrators at schools that have dropped the portfolio development course report that experiential learning narratives and documentation are more often rejected by faculty as unsatisfactory and returned to students for revision or redevelopment.

The portfolio development course also encourages more students to choose to petition for credit through the portfolio. And the course itself, if properly designed, can be a rich learning experience that enhances the student's self esteem and effectiveness as a learner--throughout the remainder of the program.

Conclusion

For the prior learning assessment program to be successful, students with potential for earning credit through assessment should be made aware of the program and encouraged to take advantage of it. Faculty involvement and support is also essential. Traditional faculty are typically most apprehensive about assessment of learning that occurs in non-traditional settings. Often they have misconceptions about the process. Faculty attitudes and perceptions about assessment of prior learning can change noticeably during an evaluator training session--not only toward the concept of awarding credit for non-traditional types of learning, but toward the entire concept of using a different delivery system for adult students. Faculty must be included in the process from the outset; training must be offered in the early stages of implementation. Influential faculty who are supportive should be identified upfront and involved in developing additional support among other faculty members.

CAEL has emphasized that faculty training should be an ongoing process and that periodic workshops be held that focus on assessor reliability and validity. After a program has been operational for a while, mentoring can become an important part of the training. At the University of Phoenix new assessors intern with experienced assessors, and this is considered a valuable component of training that improves quality and consistency.

An institution that is planning to implement a prior learning assessment program should talk to administrators at institutions with successful programs in place. Areas to examine include: How and when do applicants or students find out that prior learning assessment is available? Have faculty been trained to assess prior learning? Do they support the program? To what extent have they been involved in developing it? Has the staff in charge of the process had time to develop it? Is assessment of prior learning seen as a viable part of the adult degree program? Does it have the interest, concern, understanding and commitment of the top administration--in terms of budget, staff and training?

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NEW DIRECTIONS IN QUALITATIVE ASSESSMENT: BEYOND THE INTERVIEW AND THE PORTFOLIO

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Higher education does not exist simply to maintain itself. It must be socially oriented and ready to approach the management of quality (accountability) from a broad perspective. To this end, a rationale, model, and example of qualitative instruments are presented in this paper. The qualitative instruments provide an innovative approach to assessing student gains in the areas of self-direction and integrative thinking. Suggestions for adapting the instruments to other content areas are offered.

Introduction

Confined to its traditional teaching in an undergraduate curriculum, stories excerpted from the humanities (e.g., Gyges' ring or Plato's cave; the travels of Gulliver or the stories of Kafka) might be treated briefly from only the perspective consistent with the course in which it is covered (philosophical, historical, literary, etc.). What if we were to bring together the Socratic (dialectical) method, its application in many a school of law to particular "cases," and a diverse number of perspectives that define collectively the humanities? Were we to do so, we could extract a number of cases from the humanities, then ask students to analyze a case from a variety of perspectives: the literary analysis of textual material; the issue of

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the "proper relationship of the individual to society" from political, sociological and psychological points of view; the issue of historical transmission of material; and so on. It is just such a rationale that undergirds the development of what we see as an innovative approach to assessment, the Liberal Arts Assessment Test (LAAT).

Context of Qualitative Assessment

Sweeping changes currently underway in the world suggest not only a changing world, but a world where the *rate* of change is accelerating (consider, e.g., the Soviet Union alone). To comprehend intelligently unfolding events a person needs to be *self-directed* enough to want to inquire into the meaning of such events, possessive of background *knowledge* in relevant content areas, and possessive of *integrative thinking skills* essential to relate diverse materials dealing with said events. It is our contention that current tools primarily assess decontextualized content, providing only a snapshot of what information a student can identify at the moment. Because we are concerned with an assessment procedure that withstands the demand of *time* (10, 20, 50+ years beyond graduation) and of *space* (it can bring into resolution events in varied contexts, from the Soviet Union to the public schools in one's hometown), we set out to create an instrument that is not static, that requires contextual thinking, and that requires demonstration of integrative thinking, rather than simply "self-report" that one possesses those skills.

Although one need for such an instrument is assessment of individual students, as calls for academic accountability continue a more urgent need is assessment of academic programs: Is there an underlying rationale to the core curriculum that is clearly communicated to and understood by the student? Are connections made between the core curriculum and the major? Are linkages between the curriculum and the mission statement/goals of the college or department clearly evident? Assuming students complete a culminating ("capstone") course, are they provided a context (via the course) within which they exhibit integrative intellectual skills, and do they seize this opportunity when it is so provided? Again, if such linkages are not being made, then the relevance of many courses may not be clear to the student, and thus the opportunity for integration of knowledge bypassed.

Description and Procedures

In designing this instrument, we excerpted from the humanities a number of cases that have been identified by scholars as especially compelling and adapted these to our purpose. Our ultimate goal is to excerpt a large number of cases, eventually culling them to a repertoire of twenty deemed most suitable (10 pairs of cases, as described below).

The first step of the process is to administer the LAAT test on the student's first class day in college (e.g., in a Freshman Seminar or Freshman Studies class); for example, case 1A:

LAAT-1A

A man named Gyges has discovered a ring in a crack of the earth created by an earthquake. While in a group of fellow shepherds, Gyges happens to twist the ring and immediately becomes invisible. After several trials, he realizes that he can appear or disappear depending on how he twists this ring. Now armed with special powers, he realizes that he has the power to change his own destiny, and believes that he may even be able to change the destiny of his country and the world.

Unknown to Gyges, however, there exists another such ring; it is in the possession of Salcon, the woman who discovered it. When she is invisible, she can see Gyges and Gyges can see her, *if* they happen to be in close proximity (the normal human field of vision). What must be the fates of Gyges and Salcon?

The case (randomly selected) is followed by a series of questions that include the range of the liberal arts: analysis of the structure of the story, existence of different versions of the story, the role of such stories in culture, the question of "human nature" and the role of society in inhibiting versus refining that nature, the issue of government given the relationship of the individual and society, the issue of morality, and so on. Sample questions include the following:

- Who or what is the protagonist (hero or heroine) of this story?
- Who or what is the antagonist (adversary or adversarial force) of the story?
- What is the main idea (or ideas) contained in this story?
- Assume that you are the protagonist in this story. How would you answer the closing question and/or resolve the dilemma?
- Assume that everyone answered the question above as you did. Based upon such a pattern of responses, how would you describe "human nature?"
- What kind of society is the "most ideal" that we as humans can expect, given what you believe about "human nature?"
- Given your responses above, what kind of government is necessary to achieve the "most ideal" society?
- Assume that you are a historian who came across a record of this story. How would you determine whether or not there is any factual basis for the story? Do you believe that this story is a "true" story?
- Whether or not the story really happened, does it have some value?
- If given the opportunity to read more about this story, would you wish to do so?

The second step in administering the LAAT is to analyze the responses according to productivity participation/apathy, writing skills, knowledge of content, and ability to bring a number of perspectives to bear on the same case.[1]

Step three involves administering, at the end of the student's undergraduate education, the case paired with the original LAAT case; in our illustration here, for example, case 1B is used (an additional four cases--two sets of two--are appended to this article). Analysis of the results are to be carried out in strict accordance with the criteria used in the first condition, by evaluators blind to the initial results.

LAAT-1B

A man named Glaucon and a woman named Salcon have discovered a cave. As they descend into the cave, they are astonished to find human beings shackled to the bottom of the cave floor, with their heads braced so that they can only see straight ahead. In front of the shackled cave dwellers there is a curtain; behind them is a flickering fire. The fire casts shadows of the dwellers upon the curtain, which the dwellers believe are real (it is, after all, the only information that reaches their senses).

Glaucon and Salcon decide to set free one of the cave dwellers and bring him to the earth's surface. As the man progresses toward the earth, the light of the sun begins to hurt his eyes and he attempts to turn back. Upon finally arriving at the surface, the man is confused by a variety of sensory impressions--colors, three-dimensional shapes, texture, and the like.

Having experienced this new reality, he decides to return below to share his knowledge with the other cave dwellers. As he descends, his eyes have trouble adjusting to darkness and shadows. He stumbles as he nears his people, who see the strange images on the screen and think him foolish. Still, the man tells his fellow dwellers all that he has seen above, and informs them that the images that they accept as reality are not in fact real at all. The man offers to release them from their shackles and show them this "real world," but they refuse and simply continue on with the only existence that they have ever known. The released prisoner faces a question: How to help people perceive a reality that they do not want to perceive?

Discussion

The cases that we have excerpted here are illustrative only; literally thousands of cases could be excerpted from liberal arts sources and employed in the manner sketched. A critical goal of the project is, as indicated above, to develop enough cases and alternate questions such that the approach could be adapted to the needs of specific colleges and departments, yet to limit the cases and repertoire of questions such that evaluators could be trained and valid standards of analysis established.

It is our contention that this assessment procedure be carried out in a context removed from the course grading system (facilitating a truer reading of student participation/apathy level) and removed from the teacher assessment process (facilitating faculty acceptance of the process and avoiding a perception of it as simply more grist for the tenure/promotion mill). By keeping firmly in place the broad time-space dimensions of what is being assessed, an emphasis upon assessment of programs (not individuals) retains priority. In practical terms, this means that pinpointing with accuracy the LAAT results of one individual might be precarious, but contrasting the results of a pool of entering freshmen with a pool of departing seniors and a pool selected as a control group should be quite valid and reliable, especially as the cases and scoring methods are refined via results of pilot-testing.

Because the proposed assessment procedure examines the initial work of entering freshmen against their culminating work (and, should a school involve its alumni in the process, against post-graduate learning experiences), the procedure can be implemented as one that truly entails **risk**: Results obtained from the LAAT could actually confront us (faculty members and administrators) with the conclusion that our lofty goals are *not*, in fact, being attained--verbal reports of the "what my education has done for me" notwithstanding.

In the first place, use of the LAAT removes one argument often used to shore up an anti-assessment position: Assessment of graduating seniors is "unfair" or "meaningless" because it ignores the "raw material," the preparedness level of the entering freshman. The proposed procedure explicitly takes into account the baseline against which intellectual change can be graphed.

Second, this procedure could be employed using a variety of control groups. We could, for example, administer the LAAT to a sample of high school seniors not going on to college (controlling for socioeconomic status [SES]), to a sample of two-year college students, and to a sample of entering students in a comparable four-year university (e.g., by admission standards, class size, SES, etc.). By re-administering the LAAT to those control students at each follow-up assessment, we can analyze qualitative differences between groups. If claims regarding the value of being "liberally educated" at one's college or university are valid, then these declarations should be evidenced via an analysis of LAAT results.

Third, it should be emphasized that the development procedure proposed is not mutually exclusive with other methods. The qualitative assessment tool proposed would best serve as one part of a multiple-methods assessment model. In fact, we believe that a multi-method assessment model is most effective, provided that there is intellectual coherence to the approach. In developing a coherent strategy, we contend that evaluation must be contextual and must include measurement of both the means (formative) and the ends of (summative) education. In practical terms, intellectual-coherence is assured by requiring one instrument from each box (see below), but the repertoire of instruments available in each category is variable by department and by school. Faculty participate in the development of assessment tools (turning assessment into a collaborative effort), choose between a number of instruments (within categories), and help to evaluate the results of the assessment data. In carrying out assessment in this manner, faculty members must themselves demonstrate the integrative thinking that we desire in our students, because the proposed strategy involves integrating across a variety of assessment tools and across a diversity of content areas. Perhaps the real question becomes: Are we ready for such an intellectual challenge?

	Quantitative	**Qualitative**
Formative	• Self-direction measure • Annual drop-out rates • Use of "Barriers" instrument • Number of grants by college	• LAAT test to entering/current • Use of departmental portfolios • Current student interviews • Interview with faculty
Summative	• Self-direction measure • Standardized test, content area • % of graduate school entry • % gaining jobs in major area • Level of community involvement	• LAAT test to capstone & alumni • Evaluation of capstone papers • Interviews with employers • Review by external consultants • Level of community involvement

Conclusions

Higher education cannot afford to ignore the fact that the global context has changed and our society is demanding more from the educational institution. Our principal problem of accountability is that we have assessed educational quality by overdependence on quantitative indicators. Forgotten qualitative indicators may, in fact, be better measures of how well an institution meets the needs of its students'. Some educators have also confused efficiency with effectiveness and moved toward corporate management models. We challenge the adequacy of such models in a related paper (see Frost, Pierson, and White in this volume).

LAAT-2A

Gregor awoke one morning still in a dreamy trance. His body felt unusual--not like his own. He lifted his head and saw he now had a long, brown belly with six thin legs. Horrified, he discovered he had become a huge dung beetle overnight. After reflecting a bit on his situation, his immediate thought was how he dreaded getting up and going to a job that he hated. If he were not working to pay off his parents' debt to his boss, he certainly would speak his piece and quit. Instead, he realized that he was merely a thing, lacking backbone and brains, for his boss to use as he pleased.

Gregor lifted his head again to glance at the clock. To his amazement he discovered that he had overslept. He wondered how this could happen when he had set the alarm precisely for four. As he tried to hurry out of bed, he found that he could only rock from side to side. His only thought was that he would be late for work. The reality of his change, his metamorphosis, had set in, yet Gregor's main concern was how to get to work on time in his present condition.

The fear of upsetting his daily routine set him in motion once again. As he finally maneuvered his grotesque body out of bed, he thought about how he would have to rearrange his life in order to maintain his duties at work while in such an inconvenient physical state. What a suitable thought this was, for what else might be on the mind of a brainless creature without a backbone whose very existence was at the mere disposal of others?

LAAT-2B

Once upon a time there was a king who knew that the grain harvest was toxic; whoever ate the grain would go mad. He took all of the remaining grain from the last good harvest and had it stored in an enormous granary. Then, he entrusted the key to the granary to his friend and told him the following:

"When both my subjects and I have eaten the bad grain and been struck with madness, you alone will have the right to enter the storehouse and eat uncontaminated food. Thus you will escape the malediction. But in exchange, your mission will be to cover the country and remind the people not to forget that they are (temporarily) mad."

The friend of the king could not help but obey, and so it is this legend that encompasses all other legends. It is haunted by a creature that reigns over all others, and this creature is laughing and crying, laughing and singing, laughing and dreaming, so as not to forget that he is alone and that the king is his friend--his friend gone mad.

But what about the king? Is he laughing too? (That is the question that contains all other questions and that gives life to so many human tales.)

LAAT-3A

Gulliver found himself on a strange island inhabited by two types of creatures, Hoynms and Yahoos. The Hoynms were horses that ruled the land. They spoke to one another in a language of their own and acted upon complete reason. They were so orderly and judicious that Gulliver actually thought they were magicians who had changed themselves into another form.

The other creatures on the land were called Yahoos. They were disgusting, wretched animals that were held captive by the Hoynms. As Gulliver studied the shape of the Yahoos, he found that, oddly enough, it was not unlike his own. The only difference was the greater amount of hair and longer nails on the Yahoos' bodies. The Hoynms also noticed the similarity when they compared Gulliver to the Yahoos. Gulliver heard the Hoynms use the term Yahoo in reference to him, and he was greatly insulted. He in no way saw himself as the same as those uncivilized Yahoos.

Instead of holding Gulliver captive, the head Hoynm took Gulliver into his home so that Gulliver could live with him and learn from him. One thing Gulliver learned is that the Hoynms had no equivalent words or concepts for the English terms *lying, power, government, war, law, crime* or *punishment.* Neither, however, did they have any concept or use for the words *courtship, gifts, love, joy,* or *ecstasy.*

After a year on the island, the Hoynms offered Gulliver a choice: He could remain on the island as a member of their society, or he could return to his home in England. What is his choice to be, and why?

LAAT-3B

Adam was fortunate to have been born into a wealthy family. Following the best education possible, he invested his wealth successfully and accumulated a more massive fortune than that into which he had been born. Adam also invested significant funds into supporting political candidates that are consistent with his own beliefs: an unregulated, laissez-faire, marketplace; private property as sacred; and minimal interference by government into private affairs of citizens.

Karl and Sarah, like the majority of members of Belcheck society, were less fortunate: their parents' wages were set at a subsistence level; public school education was quite inferior to private education; citizens without homes and violent vagrants roamed their neighborhood; and governmental officials continued to represent the interests of the wealthy--to whom they remain indebted for re-election.

With Belcheck society on the brink of civil war between "Haves" and "Have-nots," Adam and Sarah are chosen to resolve the conflict--their mutual decision to be obeyed by all. The dilemma is: How to resolve the conflicting interests of the two sides?

Endnote

1. Both the content and structure of the cases, as well as scoring procedures used to analyze the results, are being pilot-tested by the researchers at this time. Thus, the cases reported on here are subject to change as a result of this testing.

NEW COLLABORATIONS: EXPERIENTIAL LEARNING AND THE SOCIOLOGY OF ART

Ann M. Galligan

A critical component of experiential learning is the effective linking of theory and practice. Although traditional models such as cooperative education have charted the educational waters in this field, new models are constantly being piloted. This paper describes the recent collaboration between Robin Chandler, an artist and a lecturer in the department of African-American studies, and myself in our attempt to develop a new model within the context of a course on the sociology of art at Northeastern University.

Introduction

Northeastern University has long been regarded a leader in cooperative education (Barbeau, 1973). The traditional model of the cooperative education experience used by Northeastern and other institutions offering cooperative education programs is designed along a pre-professional framework most commonly found within the career-oriented programs in engineering, law, business and the allied health professions (Wilson & Lyons, 1961). As cooperative education moves into the relatively unchartered terrain of the liberal arts, new models of experiential learning are being developed in order to meet the needs of students in the arts and sciences (Stanton, 1992).

Cooperative Education and Experiential Learning

How do these new models differ? As a recent study of traditional cooperative education models and new models of experiential and field experiences by Joyce Fletcher (1992) outlined, while in possession of many similar outcomes and objectives as their career-focused counterparts, the experiential models often arrive at

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these outcomes by quite different processes. Comparing the two forms of learning, Fletcher concludes that the outcomes associated with experiential or field learning can be grouped in terms of "personal and emotional development, career development and academic achievement," and the outcomes associated with cooperative education can be grouped into "personal development, career development and academic achievement." Although cooperative education places a greater emphasis on career development than does field experience (Fletcher 1992, Wilson 1974), both cooperative education and experiential learning have been found to enhance academic performance (Fletcher et al., 1990; Wilson & Lyons).

Traditional cooperative education and new models of experiential and field-based learning share many common threads, including the series of developmental outcomes mentioned above. Yet Fletcher stressed that there are differences between field learning and cooperative education. For example, the emphasis of cooperative education is on a participant's sense of competence or personal mastery versus a sense of empowerment usually associated with field experience. While both competency and empowerment tend to lead to enhanced self-esteem, they often do so by different means and result in slightly different manifestations of the esteem construct.

Experiential Learning and the Sociology of Art

One such model that both recognizes and capitalizes on the unique pathways for experiential learning by the student in the arts is currently under development at Northeastern University by Robin Chandler, an artist and visiting lecturer in the department of African-American studies, and myself. Together, we are in the process of creating an undergraduate sociology course involved in examining the social role of the arts in traditional and contemporary societies and the role of the artist from ancient to modern periods. Critical to our exploration of macro-social aesthetic conventions in expressive culture are concepts relating to individual and collective action, the theory and practice of art, and those broad micro-cultural values which shape national and international views on the status, production, distribution of the arts and artifacts.

After exploring the manner in which symbolic meaning and aesthetic concepts are socially constructed from a diverse body of readings from a wide range of authors including D.A. Siqueiros, Theodor Adorno, Roland Barthes, W. Kandinsky and Paul DiMaggio, students are asked to participate in a mini or pre-co-op, an active hand-on apprenticeship in which they work with an artist or arts organization currently involved in some form of artistic performance or production. Through this process, they are challenged to explore the relationship between critical thinking and artistic production through active participation in the creative process under the guidance of an individual artist or organization. Students from a wide range of disciplines are afforded the chance to examine the art world from the vantage point of "backstage" reality and to express their ideas through media, including video and audio production.

Desired Outcomes

While the goal of the course is to introduce students to the subject of career exploration in the arts from an artist-centered perspective, its primary objective is career exploration, discovery and self-realization. It is through active participation in a form of artistic production that students begin to "see" themselves and their career options in the arts. The model employed in this course speaks to the notion of empowerment as it constitutes an introduction to independent study work and exposure to art worlds which draws out qualities of confidence, intellectual curiosity, organizational ability and self-motivated, creative thinking critical to an increasingly interdependent and multicultural world. After participating in the mini-practicum, students are expected to develop an ability to articulate their own professional aspirations and goals in light of their new-found career awareness.

Conclusion

With a greater sense of personal empowerment and career awareness as a result of exposure to both critical analysis and practical application through participation, will these students later be able to move into the more traditional forms of cooperative education with its emphasis on competency and personal mastery? This course represents an initial attempt at constructing a base with which to explore this question.

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A TEN-YEAR HISTORY OF LEWIS-CLARK STATE COLLEGE PORTFOLIO PROGRAM ASSESSMENT POLICY

Barbara Maple
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Since 1980, Lewis-Clark State College's Portfolio Program has evolved from a self-paced procedure where students followed a set of general guidelines, two-pages in length, to an intensive, classroom-facilitated 3-credit, graded portfolio completion course with established policies and procedures for assessing and awarding block and course specific experiential learning credit. This paper addresses not only the history of the program but also criticisms by some academicians that experiential programs are not credible alternatives to traditional college courses.

Our colleges and universities are being called upon to become even more cognizant of non-traditional students' needs and the corresponding demands to implement viable changes so that all students have the opportunity to pursue lifelong learning. Among the forces are our population--the 66 million "baby-boomers" became middle-aged ("Those Aging Boomers," 106) and the decrease in traditional aged students, the challenges presented to educators for systematic reform, and the increased demand for quality programs and instruction, political and institutional support to enable access (such as weekend and evening classes, child care and financial assistance), recognition of entering abilities and professionalism.

Lewis-Clark State College (LCSC), in Lewiston, Idaho, is regionally recognized as a leading institution in defining, developing, organizing and offering alternative delivery systems. The Lewis-Clark State College Portfolio Program augments that segment of the College's role and mission by facilitating Portfolio completion classes, by advocating the inclusion of experiential learning (EPL) credits in new programs, and by diligently monitoring the program's quality.

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Overview of the Program

Although the LCSC Portfolio Program was approved by the State Board of Education and the College's administration, when it was implemented in 1980, enthusiastic supporters among the College community were minimal; however, many adults chose the opportunity to validate their learning and the program, under the College's Continuing Education division, expanded throughout many communities in Idaho. Courses to complete a baccalaureate in Management Technology were offered at night and on weekends on campus and in outreach areas. Although entry was through the Portfolio Program, portfolio preparation was self-paced and was not bound by traditional semester completion requirements. Students followed a 2-page outline and met occasionally with Continuing Education personnel, who assisted and advised them throughout the entire degree program.

While there were many growing pains during the early years, the bases for the present program was being developed. A step-by-step Portfolio Process Manual was produced and implemented, scheduled one-to-one advising sessions were effected, triple review assessment policies and procedures were incorporated and as educators increased their cognizance of non-traditional students' abilities, more of them became advocates of the program. By 1983, General Studies and Justice Studies degrees included EPL options and the division in which the student declared his or her major was charged with program advising. As the program's offerings increased, time spent advising students on portfolio preparation and development necessitated more interaction with the instructional divisions and in 1986 the program was moved from Continuing Education to the School of Professional Studies.

Under the direction of the dean of Professional Studies, long-range and annual plans were established in 1986 and are updated annually. Reports assessing the program's performance are also submitted annually. The Portfolio director prepares a monthly progress report and circulates it throughout the campus. EPL credit assessment guidelines are requested from each division and policies and procedures are reviewed and updated when changes occur.

The Portfolio Process Manual, issued to students at the time of enrollment in the program, has been revised annually, with major revisions in 1986, 1988 and 1989. Those revisions reflect the program's responsibilities to the students, to the divisions, schools, individual faculty, the State Board of Education and Northwest Association of Schools and Colleges, and the students' responsibilities for attaining their educational goals. However, prior to 1990 students' rates of completion were determined more by Portfolio Program personnel initiative and the students' projected graduation date than by the students' self-motivation. Our statistics show that although we had averaged 5 portfolio evaluations per month from 1983 through 1988, by 1989 the averages had decreased to 3.6 per month. Averages from 1980-1983, when the program was first initiated, are not used as the writers of this paper cannot insure accuracy.

Reports by students who completed the program to others about taking up to 4 years to finish their portfolios or not completing them because the process was so time consuming and difficult did not encourage enrollments. Initially, we were concerned that enrollment/completion ratios were not as high as we expected. Lowering our program standards was not even considered. Our records proved that exacting standards, quality, one-to-one advising and positive feedback produced portfolios that built students' self-esteem and were endorsed very highly by our evaluators (deans, division chairs, instructors of record), the Assessment Committee and the academic vice-president. By following those standards and procedures to establish course objectives and content, Portfolio personnel developed and implemented a 3-credit classroom-intensive Portfolio completion class. The first class began May 18, 1989, with 5 students and one, to put it mildly--nervous instructor. The students completed portfolio drafts through Section II-Goals (see Table 1) during the 5-day intensive class by writing a timeline and narrative each day and receiving one-to-one assistance and feedback throughout the course. Two weeks later, they submitted drafts that were then reviewed by the director and returned to them with final directions for completing the Documentation and Justification sections of their portfolios. By September of that year, they had received written notice of award of EPL credit for their documented learning outcomes. Our next step was to offer more classes and to monitor, improve, and implement increased quality of instruction.

Evening and Saturday classes are offered during semesters on campus as well as week long interterm intensive classes, which are also offered at least once a semester at outreach sites. During the 1990-91 school year, ten classes were held and 101 portfolios were assessed and awarded credit compared to completion rates of 43 portfolios in 1988-89 and 68 in 1989-90.

Can an EPL course's curriculum be structured so that academicians who are not yet advocates of experiential learning recognize and understand the step-by-step process of analyzing documented learning outcomes specific to skills, knowledge, and attitudes being equally as worthy of credit as learning from traditional courses? Do the students learn anything other than a process? Is there impact beyond completion of the portfolio document?

Justification and Measurements

Over the last 3 years, we believe the completion class has become a credible learning experience for any student. How do we do it and what can we possibly measure? The students receive classroom instruction and one-to-one advising about developing a portfolio of their learning outcomes by becoming cognizant and increasing their analysis, synthesis, and critical thinking skills, which, of course, are the same as learning outcomes measured in other courses. The workshop atmosphere is less intimidating according to most of the students than traditional lecture format. And, the interaction the students and facilitator have while the students are determining their significant learning outcomes conveys affirmation when students recruit others to enroll in the program. Students write each day and submit timelines and narratives at the beginning of each class. Reviews of their learning outcomes are written in their drafts and discussed during each session. Before the end of the first session, students are cognizant that statements such as "I have years of experience in my chosen field and have learned a lot" are not acceptable and that analysis of the outcomes of their experiences (see Table 1) is the key to a successful portfolio evaluation. As Urban Whitaker in *Assessing Learning* (11) states, "One of the best things about it is that experience is an excellent potential source of learning. But it is not, by itself, an adequate yardstick for assessment. The first and most important standard for quality assurance is that credit should be awarded--in the classroom, for internships, or in prior learning assessment programs--only for learning, and not for experience."

Classes are limited to no fewer than 10 students and no more than 20, so that the range of the students' skills and knowledge can be fully explored during class participation. For example, younger students are often initially intimidated by older students' experiences. Students' support of one another becomes integrated as they review turning points in their lives. Everyone has access to the instructor. Deadlines for other segments of students' lives, limited access to computers, baby-sitter and transportation problems, childbirth, beepers for call-outs going off, illness, weather, and cultural diversity have all been experienced during one or more of these classes.

More importantly, we have gained from these experienced, knowledgeable students' recorded and documented histories of perseverance, maturity, quality, strength, and humor, a rare insight into motivations of adult learners. And, they have learned that, although they may be uneasy or frightened, they are not too old or too unprepared to enter the world of formal education, again.

Do they finish? No, not all of them, but more than 77 percent of them do, and that is a much higher completion rate than we had experienced previously. From 1983-1986 our completion to enrollment rate was 25 percent.

How is the quality and assessment of the program monitored? The policy of the Lewis-Clark State College Portfolio Program is to let the student know up front that we expect a professional portfolio of documented learning outcomes. Through a personal interview with the director or authorized representative before enrollment in the Portfolio Program, the student reviews his or her life/work history to establish that the learning acquired from these experiences is within the College's regular curriculum and that the apparent experiential learning to be documented makes enrollment in the program worthwhile for the student.

Documentation Requirements

LCSC's exacting documentation policy requires that the documentation supporting the students' specific competencies focus on a) triangulation: two credible sources, such as a job description and a performance evaluation certified by an employer and letters from supervisors documenting the student's claim, support each stated competency; b) claimed competency must equal documentation; that is documentation presented must equal the student's assertion that he or she has competence equal to the college program(s) that the student referenced in his or her portfolio; c) documentation of competence gained from a partnership must address the student's learning (this can be a challenge for the student and his or her documentation sources to differentiate the skills of each partner); d) transcripts of college courses completed prior to EPL assessment are included in the portfolio so that duplication of credit is avoided; e) only relevant sources are considered, such as a customer may be able to attest to the student's customer-relations skills but not to his or her management skills; and f) equivalency is attained by "matching" skills and knowledge with degree program requirements. Students' general competency area statements compare their learning outcomes to a degree program(s) offered by LCSC. Their specific competencies supported by documentation must equal or surpass that program(s) objectives.

Assessment Policy

Currently, block credit is granted in degrees in Management, Service Organization Management, General Studies, and Justice Studies. EPL credit is transcribed by the Registrar at the time the student has been awarded the credit, but the transcript notes that credits are not officially awarded until all other degree requirements have been satisfied. Individual full-time faculty members, deans and division chairs serve as assessors of portfolios. The individual's recommendation is then reviewed and supported or returned to the evaluator by either the dean or the division chair, i.e. if the division chair serves as the initial evaluator then the dean reviews the assessment and either certifies that assessment or returns the portfolio to the assessor with a written explanation. A seven member Assessment Committee representing the seven academic divisions of the College is appointed each fall by the Faculty Senate and meets at least once a month during the school year to review portfolio credit recommendations and recommend award of credit. The academic vice president's charge is to certify the assessment process and enable transcribing of credit.

Many of our assessors and evaluators have served for several years and are not only advocates of the program, but also are very knowledgeable about policies and procedures. There are no exceptions to operational and assessment policies. The Assessment Committee may approve, approve with additional requirements, disapprove, or alter evaluators' recommendations for any credit award. There is an appeal process to the academic vice president through petition. Students are notified in writing of the conclusions of the Assessment Committee by the Portfolio director, who serves as the executive secretary to the Assessment Committee.

Follow-up Studies

In a follow-up study conducted by the dean of Professional Studies, using a survey containing 10 demographic questions and 36 items corresponding to Portfolio Program characteristics and projected outcomes, the perceptions of 44 randomly selected 1986-1989 graduates were reported. The participants endorsed most of the College's assumed strengths of the program. From that survey the following conclusions have been utilized in examining and validating effects of experiential credit represented by completing the Portfolio Program: 1) of the 9 operational characteristics of the program addressed in the survey, only comparable quality between the Portfolio Program and other instructional experiences did not receive above average ratings; 2) benefits derived from completion of the program included positive changes in self-concept and self-perceptions; 3) positive but less uniform perceptions of positive attitudes of others toward students utilizing the EPL option were reported; and 4) the belief that they had written professional portfolios and had truly earned their EPL credits was highly rated by the students (Parker). Publication of the results of the 1986-1989 study confirmed the content and objectives of the 3-credit course that had been derived from analyzing students' experiences in the program matched the outcomes measured as goals of the program.

Operational characteristics identified in the survey that respondents regarded as very positive included enrollment in the program as a rewarding experience, precise standards, unbiased evaluation, prompt feedback, relevant assistance, and an affirmative environment. As these aspects were incorporated in the objectives of the intensive course, the results have been very favorable, from the standpoint that a) students' initial identification and analysis of significant learning outcomes are better defined; b) clarity of goals and commitment have assisted the students' growth and development; c) the students' motivation to complete their portfolios within the semester in which they enroll in the course is prompted by their desire to receive above average grades in the course as well as EPL credits; d) one-to-one assistance is still an integral factor in students' success; and e) the students' grammar and writing skills have improved.

Also, in the *LCSC 1985 Business Graduates: Examination of Effects of Experiential Credit*, Dr. Parker reported that of the 35 students who had taken the Undergraduate of Assessment Business exam, 15 had received EPL credit. He found: a) "experiential credit earners exceeded upper division credit requirements as frequently as did traditional students, b) experiential credit earners performed as well as traditional students in terms of cumulative GPA, major GPA, and general education GPA, c) experiential credit earners were more likely than traditional students to exceed cumulative credit minimums for the bachelor's degree, d) experiential credit earners performed as well as traditional students on a nationally normed standardized program impact measure: the Undergraduate Assessment of Business, e) there is no evidence to support negative stereotypes regarding experiential credit which are frequently postulated by critics of the concept and publicized in educational literature and mass media, f) statistically significant relationships among cumulative GPA, major GPA, general education GPA, and UAB scores indicate existence of a cohesive program of general, specialized, and integrated studies for business majors at LCSC, regardless of the degree they seek, or their status relative to earned experiential credit."

The 1986 and 1989 studies produced highly congruent findings and we are now in the process of surveying 1990 and 1991 graduates who chose to include portfolio credits in their degree programs. The survey, which is a revision of the 1989 survey, will also measure the students' perception of their ability to convey their competencies more accurately after completing the Portfolio Program and will be the first survey to include students who have completed the 3-credit course.

Effects

The 3-credit course has increased the students' awareness of the College's commitment to evaluating and certifying lifelong learning, and that lifelong learning is not defined in terms of traditional, curriculum outcomes. Some EPL practitioners are not as supportive of stringent written documentation requirements as our program advocates; however, we have found this practice to be a key to recruiting supporters within communities as well as the College. Often students' requests for written verification of their learning outcomes have generated interest in the program by those contacted.

Another major outcome from our procedure of personal contact by the major assessor with documentation sources has revealed support of the students' educational goals and sometimes we have been privy to knowing that increased responsibilities will be assigned to the student by the employer when the degree requirements or even when the portfolio evaluation has been completed. While this is certainly not the basis for implementing an EPL program, it does support the hypotheses that lifelong learning is not just rhetoric; that increased demands for higher, more generalized education will continue to be the emphasis for the 21st century; and that EPL, as demonstrated by graduates of the LCSC Portfolio Program, can assist higher education in meeting those demands.

Conclusion

The measurements, accountability, and outcomes have emerged from the Portfolio completion course through the results of the program's administrators' (i.e. evaluators, assessors, director) vigilant assessment of the program's results over the last 10 years. The program has evolved into a clearly defined alternative with established policies and procedures for assessing and awarding block EPL and specific course credit. A step-by-step 96 page Portfolio Process Manual is issued to students upon enrollment to ensure that they develop professional, well-written portfolios, establishing learning outcomes and identifying and relating those outcomes to at least one of the College's degree programs. However, the utmost strength comes from the students' cognizance of their competencies and appreciation of validation of their learning. We believe our program has much to offer those who are interested in alternative learning programs. We will continue to strive toward increasing the number of evaluators and advocates of our program while maintaining the quality that we have diligently worked to achieve.

Table 1 - Parts and Functions of Portfolio Manual

Portfolio Sections	Functions	Outcomes
I -PERSONAL HISTORY		
Personal History- Timeline Narrative	9-step process Significant events Overview	Increased critical thinking skills Analysis Cause and effect
Work Experience- Timeline Narrative	Skills/Knowledge/Values	Application Analysis and synthesis
Special Experiences- Timeline Narrative	Volunteer/Travel/Turning Points	Outcomes from unstructured events Reflection and synthesis
Formal Education- Timelines Narrative	Training and college transcripts	Validation of formal training Checks and balance
II -GOALS	Short and long term	Program plan and commitment
III-JUSTIFICATION	Competencies equal to college learning	Synthesis and validation
IV-DOCUMENTATION	Credible sources support competencies	Cognition and self-esteem

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FAIRLEIGH DICKINSON UNIVERSITY'S PORTFOLIO PROCESS

M. Carol Tormey

For the most part, adult learners' multiple commitments preclude them from being able to devote their full-time attention to the pursuit of their undergraduate college degrees. FDU's adult degree program, "SUCCESS," recognizes the needs of the mature learners and helps them accelerate the completion of their degree requirements by offering a variety of alternative credit bearing options, one of which is portfolio assessment.

Fairleigh Dickinson University, with three separate campuses, is the largest private university in the State of New Jersey. At FDU, mature students, 25 years of age and older, can attain a baccalaureate degree through an adult degree program called "SUCCESS". The program began in 1985 with 26 students. By September 1991, 785 students were registered in this program.

When adult students enter college either for the first time or as returning students, they are taking this step for any number of reasons, the most important of which is attaining a degree. They face this challenge with dedication and determination. Through the SUCCESS program, we assist the students in the achievement of their educational goals via the evaluation of prior learning. The degree adult students receive does not differ from those received by traditional-aged students in any major.

Prior learning is evaluated in several different ways: portfolio assessment, CLEP, challenge exam, ACT-PEP, TECEP, DANTES, and PONSI. In this paper, we will focus solely on portfolio assessment.

The Portfolio Seminar

SUCCESS students who are seeking credit for their college-level learning gained through life and work experience must attend a three-and-one-half hour portfolio seminar. In conjunction with a faculty member of the University's

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Learning Center, the students, working together in small groups, simulate the step-by-step process of writing a narrative tailored to a selected course description for a portfolio in one subject area. The group narratives are read aloud and discussed among the students, faculty, SUCCESS Campus Coordinator, and Portfolio Advisor. The strengths and weaknesses of the narratives are demonstrated, thus enabling the students to perceive the value of itemizing their documentation as their narratives progress. The importance of a theoretical and practical balance is emphasized. This simulation allows the students to see how to build a bridge (the narrative) between the course description and the documentation. Students are encouraged to use the Learning Center's resources when preparing their actual narratives.

The portfolio seminars are offered on each campus during the regularly scheduled semesters and the first summer session. SUCCESS students must attend during or immediately preceding the semester in which they intend to apply for prior learning credit. If they exceed this time frame, they are required to attend another seminar. Some students have come to as many as four seminars before submitting their portfolios.

The Guidelines

The Guidelines for Life/Work Experience Credit Evaluation, which detail all phases of the portfolio process, are distributed at each workshop. These *Guidelines* are the most important reference for the students to use when compiling their portfolios. Each step of the portfolio process is outlined in depth. A sample of an actual portfolio is included. As the SUCCESS program has grown, it has become necessary to expand and define aspects of the *Guidelines*. This is done at the end of each academic year. The student is held accountable for the most recent rules and regulations contained in the *Guidelines*.

Preparation for Application

Using the *Guidelines*, students draft a chronological history of their experiences. By using a worksheet, they are able to see the relationship between various activities and the skills or knowledge required to accomplish those activities and, subsequently, the courses related to those overall learning experiences.

Utilizing the resume format that is required in the *Guidelines*, students acquire a broader picture of their backgrounds. Some students are surprised at the wealth of knowledge that they have gained and are pleased to find that it can be translated into college credit. In order to find an appropriate course description to match their knowledge/skills, they peruse an FDU course description catalogue.

The students must obtain an updated copy of their checksheets (course requirements) in order to determine the applicability of their knowledge/skills to the requirements for the degree that they are pursuing. If a course does not pertain to an appropriate area of the checksheet, it will not be evaluated. Also, there is no evaluation of any course which would be considered a duplication of credit already received by examination, traditional course work, transfer credit, or cooperative education. This rule also applies to a course for which an "F" grade was received at FDU or another college and for any courses which could not be transferred from another institution. University Core I-IV and Business Policy, which is a capstone course, are never considered for evaluation.

Appointment with the Portfolio Advisor

After completing the steps mentioned above and preparing a rough draft of the narratives, the students make individual appointments with the Portfolio Advisor. Each student has the opportunity to have as many appointments as necessary to complete the preparation of the prior learning requests.

The Portfolio Advisor discusses the applicability of the knowledge/skills in relation to the courses being requested. The Advisor re-emphasizes the importance of the balance between theoretical and practical knowledge, ascertains the appropriateness of the types of documentation, and confirms the correct format.

The students are welcome to contact the Portfolio Advisor during every step from portfolio seminar through the posting of credits. However, they are encouraged to be patient once the completed portfolio is submitted. "No news is good news" means that the requests are being processed without any problems. Although the Portfolio Advisor may make suggestions, the burden of proof is on the student to present a creditable case for approval of the prior learning requests.

Evaluation Process

The evaluation is a three-step process. When the completed portfolio has been approved by the Portfolio Advisor, the course requests are sent for evaluation to a member of the FDU faculty who has expertise in that particular subject. Outside evaluators are never used. The evaluator is asked to return the course request within a reasonable period of time. If the evaluator chooses, he/she may contact the student to request more information, to schedule a personal interview or a demonstration of proficiency, or to supply any other material that he/she feels is necessary to validate the student's knowledge/skills. The evaluator may also call upon any references who have supplied information or written letters of validation for the student in order to verify authenticity.

After the evaluator is satisfied that the student possesses the practical and theoretical knowledge equivalent to the subject requested, he/she approves the course request and returns it to the Portfolio Advisor, who sends it to the Director of the Office of Adult Education, SUCCESS, for acceptance. When the Director is convinced that the course is valid, he/she approves it and returns it to the Portfolio Advisor. Finally, the request is forwarded to the dean of the college in which the course occurs. The dean has the final approval.

The Appeal Process

The credits requested can be denied at any level. If this should happen, the student has two options. The student may submit additional material to support the original request or the student may substitute an entirely different course request for the same amount of credit (or less) provided that it also fits on the checksheet.

Regardless of the level of denial, the student is notified by mail for the exact reason. (The evaluator, director or dean must always give a reason in writing for any denial.) If the denial occurs on the dean's level, after approval by the evaluator and director, a conference with all three parties is required.

The student has two weeks to reply to the SUCCESS office regarding the alternative to be exercised. Failure by the student to respond negates the student's options, and there is no further opportunity for re-evaluation or submission of new material.

During this process, the Portfolio Advisor acts as the liaison between the student and the person who is responsible for the denial. If appropriate, the student will be encouraged to contact the evaluator directly.

The student has only one opportunity to appeal for each course request that is denied. The resulting decision is final and binding.

Notification and Posting

After all the evaluations are completed and the appeal process, if necessary, has been exhausted, the student receives a letter from the Office of Adult Education, SUCCESS, informing him/her of the final number of prior learning credits that have been awarded. Also, a memo is forwarded to the Records Office, at the appropriate campus, stating the student's name and Social Security number, the course number and title of each course, the number of credits awarded for each course, and the placement of the credit in the corresponding space on the checksheet.

The accepted credits appear as "LE" on the permanent record card (transcript) and checksheet. The grade point average is not affected, and there is no charge for posting these credits.

Students who take advantage of the portfolio assessment process must submit all credit requests simultaneously for review. This portfolio may be offered for consideration from the time students accumulate six credits at FDU with a 2.2 grade point average through their seventh semester standing. A portfolio may consist of one to thirty credits, but may be submitted only once. The credits received are tuition free.

Each semester, a varying number of students apply for the evaluation of prior learning through portfolio assessment. The odds of acceptance are in their favor. During the September 1991 semester, there was a 98.71% approval rate.

Reference

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ASSESSMENT STANDARDS AND EXPERIENTIAL LEARNING

Danney F. Ursery

The focus of this presentation will be on standards for documentation that lead to granting of credit through prior learning assessment. After discussing the need for such standards, I propose and then explain six fundamental forms of documentation which when properly implemented will help assure academic quality in the assessment of experiential learning. Finally, I show the relation of learning outcomes standards to proper assessment documentation.

The modern American university has in the last generation or so undergone some radical changes in terms of delivery systems and on the types of students that it serves. Multiculturalism, political correctness, free speech issues have become concerns in our universities partly as a result of increases in minority and women students. We have also seen a rapid rise in the use of instructional television and various forms of nontraditional systems as a means of delivering education to students. While this new openness in higher education is good and must be encouraged, we must begin to watch very closely the effects of these changes on the education of our students. Nationwide our universities are enmeshed in a sometimes heated debate over what constitutes quality in higher education, yet those of us who are dedicated to nontraditional education rarely turn the critical eye to academic standards in experiential learning. In this paper, I will propose some fundamental forms of documentation that will help meet the demands for quality assurance within the area of prior learning assessment. Although there are those that maintain there is insufficient theory in the materials connected with the assessment of experiential learning, Urban Whitaker, in his books on assessing learning, has already laid a sufficient theoretical foundation for quality assurance. My intent, therefore, is not to revisit his framework; rather, it is to suggest how to implement his theory into practice.

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Our job as educators of adult students should not simply be that of a technician, we have to make a conscious decision to implement standards not only in the delivery of our program, but, more importantly, in the manner in which we grant credit for prior learning. If education becomes a product that universities sell, and if the student is viewed as a consumer whom we have to serve, then the degree itself becomes the primary goal for the student and the fundamental purpose of many universities becomes an attempt to give the student a degree rather than the fundamental purpose being to give the student an education. Not that these are mutually exclusive. However, lack of, or poor standards in some areas of the educational process lead to a situation where colleges are inclined more to being a degree mill or only a certification program under the guise of an education. As the enrollment of traditional age students declines, more colleges and universities are looking to adult students in order to maintain enrollments at a satisfactory level. Granting college credit for experiential learning has been one of the ways in which we entice adult students to attend our schools. We have thus seen a dramatic increase in this form of granting credit, yet there has not been a concurrent increase in discussion of specific academic standards for prior learning assessment, specifically standards for PLA documentation. I thus propose six basic forms of documentation that are essential for granting credit through prior learning assessment by the means of developing a portfolio. These forms are sufficient conditions, although not necessary in their entirety, for minimal standards for credit. Documenting knowledge can take different forms and, as such, each college should have procedures which define the minimum standards. There should be clear institutional standards pertaining to what types of documentation are appropriate for what types of learning (Whitaker 56). Many students will have a tendency to over document or to include documentation that does not demonstrate their learning. The documentation, per se, is not as important as it is for students to be able to articulate what they know. The assessment process must be careful in that it assess evidence of learning, not evidence that the student participated in a learning activity. Generally, if a student is to receive credit it must be in her own words, have general applicability outside the context in which it was acquired, contain both theoretical and practical components, and be verifiable (Mandell 86). Thus the emphasis of the student's documentation should be on her learning outcomes especially through a review of the literature and learning essays.

In section one I will discuss the basic foundation for minimum documentation standards that should be applied if college credit for experiential learning is to be given. Two assumptions should be mentioned concerning my approach. First, giving credit in a block format, for example, 18 hours in management, is not conducive to academic excellence. If credit is given, it should be given for specific courses, e.g., Principles of Management, Personnel Management, etc. Secondly, I also assume that there is a workshop or a class to assist the student in portfolio preparation and that a faculty advisor is available for questions. In section two, I will briefly focus on the necessity for learning standards for courses which are granted credit. I will not consider the issues of how to distinguish between experience and learning or how to consider what is relevant learning for college credit. These issues, as well as those that deal with the balance between theory and practice, should be decided by the individual schools that do prior learning assessment.

Section I

1. Analytical Reviews

Many students who request college credit through prior learning assessment have a substantial amount of practice, but have little understanding of theoretical concerns in that particular subject area. Analytical reviews of books and articles will enable the student to gain or display knowledge of theory. Although some course contents change very little over the years, knowledge in subjects such as science, computer science, finance, or economics can change radically in a few years. It is thus important that these analyses should be current, scholarly sources.

The student should also be expected to demonstrate more than simply a summary of the information. Asking students to evaluate or analyze a book or even an article will seem to some a formidable task. By requiring the student to summarize, evaluate, and judge you are not only able to assess knowledge of theory in the particular area, but teaching rudimentary critical thinking skills as well (Ruggiero 58-61). Most requests for credit through prior learning, especially in the academic areas, should include a review of the literature.

2. Letters of Verification

Another method of authenticating evidence of student learning is through letters that describe the learning. These are letters of verification of learning not letters of evaluation or recommendation. The writer of the letter should state her qualifications, in what context she knows the student, what she can verify that the student knows (specific learning outcomes) and the letter, or part of the letter, should be directly related to the request; vague and over-generalized letters are not good pieces of documentation (Simosko 64-68, Whitaker 57-58). If the letter pertains to more than one course request, each request should have a separate paragraph detailing the learning.

3. Certificates, Licenses, Non-credit Syllabi

What the student learned from the workshop, conference, etc., from which the certificate was earned should be clearly stated either by attaching a brief summary to the certificate, written in the student's own words, of what was learned or by referencing in an essay the workshop from which the certificate was earned. In either case it should be clearly stated what the student thinks she learned from the workshop. Simply including certificates without an attached sheet explaining the learning outcomes should not be considered appropriate documentation. Licenses and non-credit course syllabi should also have a summary of learning outcomes attached explaining what was required and what was specifically learned. For example, simply stating that one knows the principles of management is not sufficient; what these principles are must be discussed.

4. Working Papers

In areas like accounting, statistics, mathematics, computer science, etc., the student must include samples and then explain each sample. For example, in Fortran programming one would need to include a detailed explanation on how to write a program in this language. By including a program or two and a step-by-step explanation of the procedure used in writing the program the student will be able to demonstrate her learning outcomes.

5. Learning Essays

One of the complaints about experiential learners is that students know how to do something in a particular setting, but cannot explain why they do it, viz., they do not understand the theory that would allow them to apply their learning to different situations. By requiring a student to write a short analytical essay, in her own words, over what specific learning outcomes she knows about the particular course for which credit is requested, will assist in remedying this concern. These essays are generally very valuable since it tells the assessor what the student knows. Whitaker argues that an appropriate balance between theory and practice, with ample portions of reflection on both, is absolutely essential (Whitaker 13-14). By asking for a learning essay the assessment process is able to monitor this interplay between theory and practice. Generally speaking, a learning essay should be attached to every request for credit, and when used in conjunction with learning outcomes standards, can be an effective way to assess the student's learning. By asking students to write on their learning it allows them to see that education is not something completely separate from their lives and it also forces them to reflect upon their learning and life experiences.

6. Research Paper

This is a substantially longer paper than the learning essay and uses primary and secondary sources. In a subject where life experiences are not prevalent, e.g., history or philosophy, a good research paper can greatly enhance documentation. However, if it is the only piece of documentation, then credit should not be awarded.

Section II

In the prior learning assessment process, many students, and I suspect many faculty-assessors, are not sure what to look for in each request for credit. What is expected of the student needs to be spelled out. Schools may use course descriptions but these are not the same as learning outcomes. By preparing and using learning outcomes standards both parties are aware of what is needed in order to receive credit and what is needed in order to give credit. In one sense the assessment process is only as strong as its learning outcomes are good. Many adult students are unclear as to what college level learning really entails. They often confuse knowledge of bookkeeping with that of accounting or assume that because they keep a home budget they deserve credit in personal income management. It would be almost impossible to have a standard for every course, yet having standards for as many courses as possible gives the student some understanding of the complexity or depth of academic work. There is not space to discuss in much detail the procedure for writing learning outcome standards. However, because it is important that learning outcomes be used in programs that do assessment of prior learning, I will suggest only the vaguest of methodologies to be used in writing learning outcomes. When writing learning outcomes, one should be as specific as possible in stating what knowledge or skills are required and secondly, the depth or level of the knowledge should also be described (Whitaker 28). One way to begin writing learning outcomes is to start with questions such as: If I taught this course, what would I teach? If my colleague taught this course, what would she teach? What are the broadest possible goals for this course? Should I be concerned more with theory or with practice in detailing the goals? After having taken this course what would be the traits of an educated student? One could, for example, then take the traits of an educated student and work toward the content (Paul 6-9). Once the content is clearly delineated then what is expected of the student should be stated in outcomes. Whitaker states, "terms that describe broad learning goals like 'communication,' 'analysis,' or 'management' . . . may not be helpful in making clear what learning was accomplished." Thus specific descriptions of learning outcomes are necessary (Whitaker 52). How the student documents these outcomes will vary, some drastically, from student to student.

The following is a learning outcomes standard written for portfolio development in "Business Ethics." It is difficult for a student to receive credit through assessment in a course such as this primarily because of the strong theoretical component. Some do, but it is mainly those who make use of analytical reviews of the literature and of the learning essay coupled with a broad-based knowledge of issues in business ethics.

Learning Outcomes for Business Ethics

The student should demonstrate both theoretical and practical learning in the following areas:

1. Be able to discuss specific ethical issues concerning the responsibility of businesses in terms of
   a. advertising
   b. community
   c. employees
   d. environment
   e. consumers
   f. stockholders
   g. profit motive

2. Be able to discuss the issues, pro and con, concerning affirmative action.

3. Be able to explain the fundamental tenets of capitalism and how it compares to other economic systems.

4. Be able to discuss the issues involved in sexual harassment and sexual and racial discrimination.

5. Be able to discuss the issues involved in computer fraud.

6. Be able to apply moral decision-making theory to a corporate environment.

7. Be able to demonstrate knowledge of utilitarian and deontological ethics.

8. Be able to discuss the ethical concerns in issues such as drug testing, polygraph testing, child care, fiduciary duties, professional codes of ethics, whistle-blowing, conflict of interests, intellectual property.

9. Be able to demonstrate the nature of morality and how it applies to business.

Concluding Remarks

Giving college credit for experiential learning has now become an accepted way in which many universities allow students to fulfill their graduation requirements. As this area of adult education continues to grow, more schools will begin offering this option. As I maintained in the beginning paragraphs, if we do not want to be viewed as being academically weak or only a degree mill, then some academic standards must be applied in the granting of credit through portfolio assessment. Although assessment theory is minimal in experiential learning, it does exist and should be utilized. The works of Morris Keeton, Urban Whitaker, and Stephen Brookfield all offer good theoretical foundations for the prior learning assessment process. I have tried to put some of this theory into practice by briefly describing a few of the better forms of documentation that can assist in delivering a quality assessment procedure.

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CHANGING THE CULTURE OF TEACHING AND LEARNING

STUDENT SELF-ASSESSMENT:
THINKING ABOUT THE WAY WE "KNOW"

Marie D. Eaton

Narrative student self-assessment as an evaluation procedure provides a rich source of information for faculty about student learning, and also serves a unique role in encouraging students to become more engaged and empowered in their own learning. This paper describes the use of narrative student self assessment in both a non-traditional interdisciplinary undergraduate college which uses self-assessment as the primary mode of evaluation and in a more traditional community college which uses self-assessment within the context of letter grades. The benefits found and the problems faced in the commitment to self-assessment are addressed.

Assessment of student learning is a major thrust in higher education today. Colleges and universities increasingly are being asked to provide evidence of how our students are affected by their college experience. Some of this pressure comes from our own commitment as educators to know more fully what happens to students in their college years. Moves toward increasing assessment activity has also come as the result of state-mandated requirements to examine "outcomes" of the college experience, often to justify funding. As Pat Hutchings said, "It's clear now that assessment isn't going away, but how will it change our work on campus? What conception of undergraduate learning does it imply? How can it alter the ways we think about and work with students - or with one another?" (1990, p. 1)

The special challenge for non-traditional colleges is to develop assessment procedures that have a "fit" with our institutional missions and philosophies.

For a number of colleges, student narrative self-assessment has provided one alternative. In this paper, some of the parameters of narrative student self-assessment will be discussed in the context of two institutions, one which uses narrative self-assessment with faculty response as the primary mode of evaluation and one

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which uses self-assessment in the context of letter grades. The following discussion will examine these two environments and address some of the benefits found and the problems faced in the commitment to self-assessment.

Student Self-Assessment at Fairhaven College

Fairhaven College (FHC) at Western Washington University, an interdisciplinary undergraduate college within a larger regional university, has used narrative student self-assessment as the primary means of evaluation since the college was established in 1967. There are two major components to the self-assessment process: self-assessment of work in classes and self-assessment of the college experience.

The development of student self-assessment skills is a central part of the Fairhaven experience. Fairhaven does not give letter grades. In order to receive credit for any Fairhaven class, students must write narrative self-evaluations (SSEs) of progress and accomplishments in the class. The faculty member responsible for the class responds to these evaluations in writing. Copies of evaluations and responses become part of both the students' and the faculty's permanent files.

All Fairhaven students take a capstone seminar in which they write "Summary and Evaluation" papers (S&E). In these papers students describe and critically evaluate their experiences in college, paying attention both to ways in which the institution helped or hindered their progress and to their own developing knowledge of subject matter and themselves as learners. The Summary and Evaluation Paper requires students to take a self-evaluative stance as they reflect back on their college experience and is usually a rewarding experience for students.

> The Advanced Seminar is one of Fairhaven's meaningful rituals, making graduating a meaningful experience. I was obsessed for weeks by the process of summing up and evaluating my entire, life-long, education. FHC[1]

> This seminar has provided a wonderful structure within which I have been able to thoughtfully look back over my 4 years, reviewing, questioning, bringing to articulation a portrait in words of my experience here. . . Writing my S&E was a chance for me to come to a sense of completion with what I have accomplished at FC and to also see I take with me much work still to be done. FHC

Student Self-assessment at Seattle Central Community College

Seattle Central Community College (SCCC), an urban community college, uses a standard letter grading process for evaluation. SCCC has been experimenting with SSEs for the past three years. One discrete class, "Ways of Knowing," focuses on the development of self-assessment skills. In this class, students write and talk about their own education in order to develop a vocabulary to evaluate their own learning experiences. Along with readings and seminars on learning and learning styles, students practice self-assessment by evaluating their own educational experiences in other classes in which they are concurrently enrolled (Waluconis, 1990).

Narrative self-assessment is also used in many of the Coordinated Studies (theme-based blocks) programs at SCCC. The extensive self-evaluations from these 18 credit programs resulted so often in students owning and becoming more involved in their own education that faculty have begun to discuss ways to include SSEs in other discrete courses. Although SCCC has retained a traditional grading structure, some instructors now use self-assessment as a final assignment in class or as an evaluation process for individual assignments. This paper will discuss these two experiences with self-assessment and address some of the benefits found and challenges faced in the commitment to student self-assessment.

The Agenda and Context for Using Self-Assessment

In both institutions, the premise for using student self-evaluation is simple: one way to discover what students are learning is to ask them. Self-assessment helps students find the learning that happens in the space of mediation between self and knowledge, in the transaction of self and environment. SSEs should not be included as an afterthought, but should be integral part of goals of class, imbedded as part of the curriculum as a supplement to other work and discussion. Deciding to use SSEs as part of the evaluation process does not mean that faculty give students complete control over determining standards or criteria for performance, but rather that faculty encourage students to reflect on their own participation in the learning process and to find the connections between knowledge and their lives.

SSEs can be a simple record of learning and a moment of accountability, but at their best they are also a process of self-discovery. As students "name" it, something happens. They begin to construct the "meaning" of what they did. Frequently the SSEs become an "epistemic" writing experience - through the writing something is discovered that was not clearly seen before. As one student's self assessment said,

" . . . this did not occur to me as I was trying to write the papers. It only occurred to me right now, as I'm typing this." (Taylor, 1990)

Educational theorists have written about the connection of reflection to the learning process. Kolb's work on the learning cycle (Kolb, 1981) included "reflective observation" as an essential part of a four-stage process. Theorists describe learning which leads to synthesis and self-development as distinctly different from learning defined by the acquisition of the objective, factual content of a course.

These changing views about the nature of learning and relationship between assessment and learning are receiving more attention in the academy today. Faculty increasingly share some assumptions about learning which guide the development of assessment processes: Learning includes more than gathering facts and concepts in any one content area; accountability should include the voices of students; learning is more likely to occur when students have a sense of ownership, engagement and agency and are encouraged to move beyond the stance of "received knower" to construct their own knowledge; learning involves making an action out of knowledge - using knowledge to think, judge, decide, discover, interact, create; learning succeeds to the degree that it gradually assists the learner to take control of his or her own learning process. SSEs are an important part of the evaluation process in this kind of learning climate. Additionally there are benefits in both faculty and student development from the inclusion of SSEs as part of the evaluative process.

A Different Kind of Conversation about what Happened in Class

Reading SSEs in a student's own language often provides insight into cognitive and affective development that may or may not have been an overt objective of the course. Access to the student's own description of the experience gives a faculty member a better understanding of the kind of learning that is not easily tested.

> I knew upon arriving at Fairhaven that my old ways of learning were going to be challenged, which is exactly what I wanted. I have always been an expert at memorization and regurgitating information to satisfy an instructor or requirement of the class (ie grades). I have also for many years been silent, afraid of my own voice, intimidated by others' knowledge and ease with which they spoke. . . I have learned to ask questions of my self and others. . . I feel as if I've been gently forced through the material to ask deeper questions, requiring deeper answers and to realize that the learning, my education, will continue as long as

> I'm open to new information or ways of looking at the work. For the first time in my life, I feel as if I'm being educated. FHC

> During this quarter I realized that to accomplish something extraordinary you've got to step out and attempt something you're not comfortable with. That one insight is worth any length of time. SCCC

> Where once my world was black and white, good vs evil, I am beginning to see beyond the need to draw boundaries in our thought processes. FHC

More Explicit about Learning Outcomes

SSEs also give the instructor a clearer idea about what students perceive to be the most significant areas of learning. Many times what students learn is not what we planned when we wrote the syllabus. Narrative self-assessment allows us to tap the power of their language, their own "voices" to describe what happened for them in the class. For example, concerning a Chemical Dependency and Domestic Violence class, a student wrote:

> In terms of writers or others involved in the field, I was introduced to a host of professionals who are doing a great deal of research and work in the fields of domestic violence and voice. In looking at lesbian battering, I see myself continuing to read updates on what is being done to make services available to lesbians, and to follow the breakdown of the silence surrounding the issue in the lesbian community. SCCC

Other students had similar experiences of stepping beyond the syllabus and the class requirements.

> American Sign Language is a foreign language. I had to forget the use of complete, descriptive sentences in ASL, and instead concentrate on concepts. The key to learning ASL is knowing that a concept has to be created and a formulation of images connected. SCCC

> Within the learning of this rudimentary, building block level of algebra, nothing would be gained by my trying to assert my voice or inflict my opinion upon the proceedings of the class. I find that learning Algebra is like learning the most succinct language of all. If within this language

> I chose the incorrect "word," the "meaning of the sentence" would be totally erroneous. SCCC

SSEs can be a form of action research, giving feedback on the effectiveness of our efforts as educators. From their reflections, faculty learn about the strengths and weaknesses of curriculum and pedagogy. SSEs provide glimpses of where certain practices over-challenge or under-challenge students in their learning, and about where practices inhibit, rather than promote students' progress (Taylor & Marienau, 1989).

Feedback about the learning process is found in a wide variety of SSE exercises and does not need to occur only at the end of a term. The "one minute papers" suggested by Patricia Cross and her colleagues (1988) are a kind of SSE. This strategy asks students to reflect at the end of each session about what they understood from the day's work and to identify and skills or ideas they still do not grasp. Faculty who use this kind of strategy report:

> "I just never know this much about my students' thinking," he told us. Wanting to understand more, I asked him, "So, the power of Classroom Assessment is in giving you more information about students. Is that right?" And he paused and said, "Well, yes, it's information. But really, you know, the bigger difference is that I never thought to ask these questions before." (Hutchings, 1990)

The use of the self-assessment process instead of or in addition to grades may change students' and faculty's relationship to subject matter. Although the assessment process ought at minimum to provide an indication about whether students are learning what faculty members believe they are teaching, typically any assessment or evaluation process is surrounded by questions that have little or nothing to do with the content or the student's relationship to the content. As Pat Hutchings indicated, most of these questions are all too familiar to faculty. "What do I have to do to get an A? Why do we have to do this paper? Why don't you just tell us what you are looking for? Do we have to know this?" (1990, p. 5) Additionally, when graded tests and other more traditional forms of assessment are used, sometimes the material used to garner assessment data is that which is easy to measure, rather than what might be most important to know. If narrative self-assessment is used as an evaluation procedure for an assignment or a class, there can be a shift toward understanding the material rather than wringing a grade out of the class assignments. Assignments can be tailored to what suits the material being studied rather than what is easy to grade.

> That is what I enjoy most about this class (Anthropology), actually being able to enjoy the terms and concepts. It isn't about memorizing from a book, but about thinking. SCCC

Shift in Student Responsibility and Locus of Control

Through the narrative faculty response, students are given more concrete feedback on the nature and quality of their work which gives them more power to define themselves as students. As one student remarked:

> The self-assessment process helps me understand not only that I am considered a good student, but why I am considered a good student. This kind of feedback gives me the tools to improve. FHC

Through the self-assessment process, students also often describe some new insights about themselves as learners.

> I kept thinking this would get easier once I wrote it down. It only got harder. I kept hitting wall after wall, coming to no conclusions with my ideas and my time was running out fast. A classmate called me two days before it was due and said, "I want to read your notes, let's go have dinner." We ended up just talking about things we'd been afraid to say in class because we thought we were wrong. It dawned on me that these "wrong" things were the things we thought to be most important about the readings and they directly related to the questions on the exam. Suddenly, we both began writing furiously. We both had our answers. Before this dinner I had thought two things: 1) my writings aren't good enough to let anyone read, and 2) I do not need anyone else's input on my writings; that will only distract me. I was dead wrong. SCCC
>
> Another important idea I expanded upon this quarter was my ability to speak out, to use my voice. This idea is probably the most connected idea of this quarter because of the fact that I've used it in every class and area of my life. In English, I was using my voice the second week of class when I read my paper on lesbian and gay youth aloud. In Japanese, I found my voice when I found the courage to talk with my teacher face to face about my grade at midterm. And at home, I found my voice when I told my lover that I needed time alone and I told myself that yes, I was a victim of all forms of childhood abuse. SCCC

Additionally, using the self-assessment process instead of or in addition to grades requires that students confront their own learning and participation in the learning process more directly. As one student said:

> When I take a graded class, I can just live with the C+, but when I have to write a Self-assessment, I have to take responsibility for what it was I did or did not do that earned me that grade. It makes me confront myself more directly. The process makes me be more honest, both with the instructor and with myself. FHC
>
> Giving yourself a grade (in a way) probably contributes more to your strengthening as a student and an individual than receiving a grade from a teacher (someone else). It is easier to disregard some other person's analysis of your efforts if perhaps you are given a low grade. On the other hand, your ego may be overly inflated because you received a high grade. The self-assessment makes students look more closely at their efforts and puts a demand on students to be honest with themselves: a difficult but righteous thing to do. FHC

Life Long Learning

Most faculty agree that effective adults are those who are able to assess accurately their own efforts and use the assessment to improve future attempts. Most of us share Hutchings' view of the goal of a college education.

> The object here is graduates who know their own strengths and weaknesses, can set and pursue goals, who monitor their own progress and learn from experience. There's considerable evidence now that students who are self-conscious about their processes as learners are better learners, that they learn more easily and deeply, and that their learning lasts. The fashionable label for the skills in question here is "metacognitive," but whatever you call them they represent a kind of learning that speaks to a belief that learning is personally liberating, self-empowering, and for all students. (1990, p.7)

We hope that part of the college experience will be the development of these skills of self-assessment. However, they may not develop for some students without practice and feedback. Through the self-assessment process, Fairhaven students often show growth in becoming more self-reflective, developing self-evaluative skills and carrying them forward into other areas of their work. Although this phenomenon is recognized by faculty, we are only now beginning to take the steps to document some of this growth through a project using the Measure of Intellectual Development (MID) which uses the Perry model of cognitive development to track student development through their own writing. The following quotes from student evaluations over time illustrate this kind of growth. The kind of evaluative statements made become more sophisticated and more reflective over time as the following excerpts illustrate.

> Student #1 Year one: "I really don't know how I can evaluate myself or the class. I learned a few things - a lot that was covered was new to me. I didn't fully participate, but I did attend whenever I could."
>
> Year three: "Although I did not find the time to accomplish all that I would have liked to, I feel a sense of accomplishment at the completion of this study. . . I hope that my contribution to the class has provided some new insights for some and at least opened up some new areas of discussion. I felt that at times I could have expressed myself better.
>
> Year five: "The work I did this quarter, though mostly research and the formulation of questions for further inquiry, was probably the most important study I have undertaken. What began as a follow-up research project for clarifying what I had learned in the previous two quarters has become the basis of what promises to be the most important product of my education." FHC
>
> Student #2 Year one: "I attended this class every day. I participated in discussions and field study. I did a research paper on Janis Joplin and I feel I did a very thorough method of research."
>
> Year three: "This class was sometimes difficult for me. At times I felt extreme emotions toward the different ideologies expressed during class. However, these different ideologies helped me examine and change my own attitudes and ideologies. At other times I felt unchallenged and apathetic. Although my attendance was average, it could have been more regular toward the end of the quarter." FHC

Paulo Freire, in his discussion of pedagogy, argues that students must be given work that they can think of as theirs; the work they do must matter, not only because it draws on their experience, but also because that work makes it possible for students to better understand, and therefore change, their lives. The self-assessment process can assist students to ". . .perceive critically the way they exist in the world with which and in which they find themselves; (so they can). . .come to see the world not as a static reality, but as a reality in process, in transformation," (Freire, 1984), and can help students articulate and recognize that they have learned more than the class syllabus advertised as they reflect on the ways learning will continue after the class ends.

> I don't know what my major will be, but what I have learned about critical thinking, working with other people in groups or as partners, and being able to visualize things as they are being related to me, will be of benefit to me throughout my life. Equally important is the realization that I have a right and a responsibility to question what I don't understand or agree with. I hope that I can instill this in my son . . . SCCC

Changes in Power Relationships

When grades are not the only driver for doing the work in the class, students often find there are intrinsic reasons for tackling the material and concepts presented in the course. Additionally, they often begin to recognize their responsibility for experiences in the learning situation. They become their own best critics. The self-assessment process demystifies authority. Even if grades are assigned, no performance or achievement can be merely labelled with a letter; the student's substantive description also carries the weight of evaluation and makes the work, not the letter symbol assigned, real.

> I feel that I accomplished everything that was asked of me during this seminar. My only question would be: did I accomplish all that I might have expected from myself. . . ? I don't feel I was able to gain as complete an understanding of "leadership" and the "biography" as I feel I should have. I think I would need more study in these fields to feel completely comfortable with them. I feel I might also have been more assertive in class. FHC

Using SSEs gives students a voice to describe their own experience in the class, and also gives them some power. The evaluation is not relegated only to others, but it also involves the self. Faculty traditionally have enormous power and control through grades (the "sacred GPA"). SSEs gives some of that power back to the students.

> It is not grades that define me or my learning, a reality that I can easily forget at times. SCCC

> I learned that it was up to me to take responsibility for my learning and I stopped placing the blame on the course or the instructor. FHC

Using SSEs is not without problems and challenges, however. When students express concern about narrative grading, the focus usually centers around their fears about access to other programs in academia. The currency of the academic world is the GPA and students compete in that world. Their fears are often justified as many programs do use GPA as an initial screening method. However, most colleges using narrative self-assessment have been able to work successfully with graduate programs, law and medical schools and scholarship committees to help them interpret narrative evaluations and determine appropriate equivalencies. This step does require extra time and commitment from faculty and staff.

Additionally, inviting students to connect their learning to their own lives and to examination the relationship of self to current and past learning situations can sometimes be emotionally laden. Most faculty are neither comfortable with the kinds of self-disclosure which can happen, nor are they prepared to help students when they confront the kinds of issues which may arise. When faculty and students set mutually agreeable parameters early in a course to guide the self-assessment process and when appropriate resources for talking through the "unexpected learning" are identified, this difficulty can be largely avoided.

Not all learners enjoy or value the process of self-assessment. As Taylor (1990) reported:

> One woman described it (an SSE) as "psychological ka-ka" and indicated that she would do it only because it was a requirement, but "kicking and screaming all the way." And, despite our suggestions for a shift in perception, her "self-assessments" have really been program critiques. (p. 23)

However, most students, when interviewed at the end of their programs, view SSEs as a valuable and important part of their learning experiences in college. Apparently there is something about self-assessment which they are able to generalize to other areas of their lives. The ability to examine one's accomplishments in a particular learning environment sharpens the ability to evaluate oneself in a variety of other arenas.

There are some additional potential problems which center around the faculty's perception of the importance of the narrative grades. Writing narrative responses to the student's self-assessment requires concentration and commitment. Some faculty respond in vague or relatively superficial ways, or slip into the use of cliches which find their way into all evaluations, robbing them of the personal focus. Other faculty find it difficult to be constructively critical. The narrative process then becomes simply an affirmation of all the student did well with little critical dialogue about those areas which could have been improved. Both these kinds of responses undercut the power and purpose of the self-assessment process.

Some administrative considerations must also be addressed when considering the use of narrative evaluations, particularly if they are considered as a replacement for letter grades. The first is simply the increased amount of paper flow. Grades don't take up much room (4 digits each) and are easily stored. The narrative evaluation usually require multiple forms, filing cabinets, and staff time to process them.

The commitment to the use of narrative evaluations has implications about the size of classes offered. Although students in large classes could still be encouraged to write self-assessments, either for individual assignments or as summaries of a class experience, personal responses from faculty to these evaluations are difficult to impossible to do for large classes.

Finally, the curriculum must provide avenues for students to learn the skills of self-assessment. Most students come to college with little or no experience in taking a reflective look at their own learning.

> I found the Self-assessment difficult to write. I've never had to do an S.E. before, so I hope they will get less difficult as I progress. . . FHC

For many students, the self-evaluation can become a reprise of the syllabus or a reciting of events in the class. For example:

> We read a progression of autobiographies for the class. The first is a short chronicle of events lodged in familiar time and place; it matched my initial idea of what an autobiography could be. Then we read the diary of a women. It used a complexity of prose and structure I had not seen before. . . The last autobiography, like the first, is a chronicle of events, but more specifically a chronicle of a life's work. FHC

Both Fairhaven and SCCC have addressed this concern by becoming more self-conscious about teaching the skills of self-evaluation. Using drafts of the self-assessment, feedback, prompts and focused questions, we are attempting to provide students with a more structured experience to build these skills.

Summary

Previous research has indicated that students who were given an opportunity to regularly reflect on their learning and life at college described the satisfaction gained from being offered the chance to engage in self-assessment. Perry (1970) indicated that students often regarded the interview about their previous year's work as a highlight. Students in colleges which have incorporated self-assessment into the curriculum concur. They are eager to discuss and study their own learning and development.

> Student enthusiasm was noticeably high throughout the quarter. It felt to me in the front of the room as if a current of water was rushing to fill a space where previously a vacuum had existed. . . Here was time in their studies to reflect on the higher learning for which they were paying and to which so many people were dedicating so much time. Here was time to "jump off" education as an industrial treadmill and time to contemplate and hold seriously the knowledge and processes to which students were being introduced. (Waluconis, 1990)

Even though there may be difficulties in integrating self-assessment into a college curriculum, we believe that the benefit to students is substantial and justifies its use. Given a world in which paradigms are shifting rapidly, growth in student ability to be self-reflective and to evaluate both performance and process may be one of the most important outcomes of a college experience. The use of narrative self-evaluation is one method to develop those skills.

Endnote

1. All quotes marked FHC are from students at Fairhaven College. All quotes marked with SCCC are from students at Seattle Central Community College and are taken from Carl Waluconis' work on student self-assessment (Waluconis, 1990).

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THE NEW LEVIATHAN:
REMAPPING THE POLITICAL GEOGRAPHY OF HIGHER EDUCATION

Vivian Kuzas
Kevin O'Neill

We who work in accelerated adult programs often find ourselves creating new academic structures to meet unexpected challenges that such programs create. We often create jobs and power relationships that bear little resemblance to traditional academic practices. These necessary but unprecedented changes solve immediate problems but also establish a rough dialectic of development: the new position that solves problem x in its turn affects other jobs and structures and creates its own set of new problems, which demand further modifications in structures and jobs, and so on until a rude equilibrium is attained. Our paper will describe one such dialectical progression.

> As for the things that we have to learn
> before we can do them, we learn by doing them.
> Aristotle, *Nichomachean Ethics*

Aristotle's claim fits, I think, the shared experience of many of us who are involved in accelerated adult degree programs. Shifting the metaphor from whales to ships, we often find ourselves building the ship as we sail it not because this is how we prefer to build but because when the ship was launched there were no blueprints or because the ship we originally launched proves inadequate for the squalls it encounters. And more often than we would like we find that the new building we do strikes us as unfamiliar and even bizarre: the things we create to keep afloat are often hard for us to understand because they are so unlike anything we have seen on ships in the past. We are often chagrined, tested and even frightened by the very structures that insure our survival.

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Dropping this analogy, which has taken us as far it can decently do, our point is that the challenges that new accelerated programs present, as they move from the paper stage into reality, almost inevitably compel us to create new structures, jobs and relationships which bear little resemblance to traditional academic practice. These necessary but unexpected changes solve immediate problems but also establish a kind of rough dialectic of development: the new structure or job description that solves problem X in its turn affects all other structures and jobs, and thus creates its own set of hitherto unexpected problems, which in their turn demand more structural and relationship changes, and so on until a temporary quietus is reached.

Today we want to discuss this developmental dialectic in a specific context, the planning and launching of a partnership degree program in concert with the Pacific Bell Telephone Company. And we will restrict ourselves to the ways in which this dialectic affected the day-to-day jobs of full-time faculty, staff and administrators, often altering traditional power relationships in ways that were sometimes profoundly challenging to the status quo.

The University of Redlands is an independent, coeducational university founded in 1907 by the American Baptist Church and citizens of the city of Redlands. The University has 1500 students enrolled in its traditional residential program.

In 1976, the University established the Alfred North Whitehead Center (ANWC) for Lifelong Learning. The Center, dedicated to providing quality education for adult students who are employed but who wish to pursue advanced undergraduate or graduate study, is headed by a Dean, Associate Dean, three academic department chairs (Liberal Studies, Management and Business and Education), a Dean of Admissions, and a Director of Academic Services/Advisement. Whitehead Center currently has more than 2500 students enrolled in both undergraduate and graduate programs. At the undergraduate level, we offer programs in business and management, information systems and liberal studies. Graduate programs are offered in education, business administration, management and education.

Whitehead programs are offered via a lock-step program which moves groups or "clusters" of students through a pre-determined curriculum. Classes meet one evening per week in either a regional center, rented classroom facility or corporate meeting room.

Pacific Bell and Pacific Bell Directory are two of the four operating companies of the Pacific Telesis Group, formed in 1984 as a result of the AT & T divestiture. Pacific Telesis' primary goal is to remain a leader in the highly competitive telecommunications industry. The organization emphasizes the importance and need for continuous development of technical and management knowledge and skills in its 67,000 employees. Every employee has received some type of corporately sponsored training; some of the classes offered by the corporation have been recommended for academic credit by the American Council on Education (A.C.E.).

In 1985, Telesis Management Institute (TMI) was created to meet the training and education needs of Pacific Bell employees. Self-Directed Education, a program within Telesis Management Institute, has specific responsibility for providing Pacific Telesis employees with access to university-level education both on college campuses and on-site at Pacific Bell facilities.

Because of the previous success of the on-premises two-year degree completion programs that Whitehead offered to PacBell employees who had previous college experience, Self-Directed Education approached ANWC to design a four-year accelerated program leading to a Bachelor of Science in Business and Management. Three specific curriculum design features were notable in this request. First, given that many of the prospective students were 40+ years of age with little or no college experience, it seemed evident that a "Gateway" or pre-college preparatory program in mathematics and English was required. Secondly, it was imperative that some fit be established between the existing upper division degree completion program and lower division prerequisite and general education courses which would be offered in the first two years of the new program. Thirdly, the Corporation challenged Whitehead to incorporate technical and management development currently in place within their organization into educational partnership courses within the four-year curriculum.

In approaching the University of Redlands with the opportunity to develop a four-year accelerated degree program, the Corporation also set the stage regarding its expectations.

At the top of the list was the expectation that the program, whatever its ultimate design and sequence, be of high quality and have a clearly defined quality control mechanism built in. The Corporation demanded a seamless, transparent administrative structure with a single contact person with the authority to negotiate within and around the University and "get things done".

Prospective students were also very clear in their expectations. They wanted an opportunity to take advantage of the educational opportunity provided by the Corporation but did did not want to disrupt their already busy lives any more than necessary. They also expected to have influence over the application of standards within the program - those standards applicable to faculty and students which we all recognize as standards established and maintained by the University. The students also came with short-term expectations for simple, speedy and competent service and problem-solving.

The University also came to the table with expectations, with perhaps the highest being the increased revenues to be obtained from this new venture. This expectation quickly changed not away from the financial implications but toward the question of ownership - simply put, in order for this endeavor to be successful, typically autonomous units like departmental faculty and support staff must, as we shall see, work together in accepting equal responsibility for delivery and implementation of the new program. In other words, faculty could design a building. It would look good but could not stand without support from people who were usually perceived as lower in the hierarchy.

ANWC was approached by Telesis Management Institute in October, 1989 regarding creation of a four-year accelerated degree program. Shortly thereafter, a small group of faculty were invited by the Dean to join him in creating this program which came to be known as CONNECTIONS. These faculty, two from Liberal Studies and one from Management and Business, worked in cooperation with the Dean in rising to this challenge. Since their work was being done in almost absolute isolation, this group also was involved in discussion with the Corporation, in general, and with prospective students, in particular, regarding the path Connections was taking. In other words, in addition to creating the Connections curriculum, this group was also doing pre-admission counseling, creation of admission forms, site suitability visits, etc.

The first glimpse at the program itself occurred in February, 1990 when it was presented to TMI. The enthusiastic response with which the program was met was unpredicted. Shortly thereafter, the entire Corporation was hearing about this pending opportunity. In July of 1990, the University was asked to hold meetings within the Corporation for employees who had heard about this new program and were interested in getting on with it.

September of 1990 found ANWC with eight clusters throughout Southern California (for a total of 170 students) - well over the projected two clusters totalling 30 students. Although the first course (a 14-week prematriculation non-credit "Gateway" course in mathematics and writing skills) had been developed and approved by the Curriculum Committee and the Program in general had received approval upon its intention and direction, the faculty charged with putting meat on the bones were working a mere two weeks ahead of the courses being implemented.

Several issues were becoming rapidly evident: first, the faculty in charge of development had taken this task on as an additional workload. Each of them already had a full-time job. And, in addition to curriculum development, all four members of the group were also involved in teaching the first Connections course. Secondly, administrative support was missing. The changing nature of the program, the evolutionary nature of the program and difference in approach and clientele cried out for some sort of administrative and staff involvement and support.

Although there was a PacBell Connections Steering Committee made up of faculty and administrators, this group did not have either the time or the inclination to operate as day-to-day overseers of the program. So one of the founding faculty, already fully employed and then overloaded by planning and teaching in the new program, was offered a stipend to administer the program. This was a first move in the dialectic of reaction to new challenges. But paying one over-extended person a stipend did not make his job more doable: money cannot, in the last analysis, create new time. So the responsible faculty person began, imperceptibly, to share his responsibilities with the head of academic services, a non-faculty administrator who had the staff and know-how to understand and solve technical administrative problems. Although this person never received a stipend for her work, and moreover did not have such responsibilities in her job description, she became a willing de facto partner in the day-to-day management of the Connections program. In fact administrative decisions about Connections, as well as much trouble-shooting, went through her office.

But this situation created its own problems because it was distracting both the administrator and the faculty member from their respective jobs. To counter this a new position was created - administrative assistant for the program, who interestingly did not work for the Connections faculty leader or for the Steering Committee but for the director of academic services, whose de facto leadership was thus implicitly acknowledged. The faculty person now worked with an administrator and *her* assistant; he had in effect become, by a natural process that reverses normal power relationships but which got the job done, the adjunct to two non-faculty people. He helped them, rather than the reverse.

The situation was further complicated when the department of Liberal Studies appointed a new chair from the residential campus, then shortly thereafter hired a mathematics and a writing specialist to oversee and revamp the pre-matriculation course and any other quantitative or writing courses offered through Connections.

The first move was not designed with Connections in mind. But since the faculty overseer for Connections was a member of the Liberal Studies department, and since many of the general education courses offered in the program during the first two years fell very roughly into the area of liberal arts, the new chair and his enhanced department now unofficially "inherited" some responsibility for Connections although there was no formal statement of Liberal Studies responsibility for that program. And because the original Liberal Studies faculty member stipended to oversee Connections was rapidly burning out from overwork, the new chair mimicked the administrator and began, again unofficially and in a purely ad hoc manner, to take over the other faculty member's day-to-day responsibilities, while the burnt-out faculty member still retained the *de jure* title of overseer for the program. Further, because the new chair was assuming de facto responsibility for the program he was invited to become part of the Steering Committee, a committee to which the head of academic services already belonged.

This created a new triumvirate - the administrative assistant who usually fielded problems via the telephone and FAX machine; the head of academic services, who was the administrative assistant's support and who planned many tactical responses to student and program problems; and the chair of Liberal Studies. So, an entirely informal network of people created a new shared job for themselves; three people, only one of whom was officially tied to the program, were running a four-year, multi-million dollar program whose courses were still in process of creation.

The hiring of people to oversee the teaching of mathematics and writing illustrated still another problem. The faculty who originally designed the prematriculation skill-building course were not mathematicians or writing specialists. They were people with degrees in management, history, counseling and philosophy, and the part-time faculty they hired to help them teach the program were also non-specialists, for the most part, working outside their fields.

Predictably, math and writing courses designed by non-specialists were less than perfect, especially as tools to prepare students for college-level work in both fields. But surprisingly, despite the essentially amateur nature of the courses, they did work to a degree. And when the specialists arrived and began to rework the courses there was some quiet resistance to what was seen, by some, as a violation of a course that had already become something of a tradition, and to which the planning faculty felt emotionally connected.

But the arrival of the specialists had another, indirect, effect. It soon became clear that a large multi-year program could not be planned by an ad hoc triumvirate that snatched moments from their other duties to run Connections. Their administration was always about local issues and immediate particular solutions. They had neither the time nor the responsibility to engage in long-term planning or systematic assessment. Their very success in dealing with the day-to-day problems of the program revealed how ill-equipped they were to deal with larger and ultimately more pressing issues.

The Whitehead Center's response to this insight was to create another job, this time one with an official title and responsibilities. Whitehead appointed one of its Business and Management faculty to be Director of Corporate Programs, an entirely new job for Whitehead. This position was meant to provide a focus for longer-term planning for Connections. This person was also added to the growing PacBell Steering Committee, and was given authority over the PacBell administrative assistant, who then became the shared "property" of the director of academic services and the new director of corporate programs, who had no other staff support.

The creation of a new job did not void the presence and power of the Steering Committee, nor did it really remove either the chair of Liberal Studies or the stipended faculty member from the picture. The latter recovered from his burnout and maintained a role as the de facto academic overseer of Connections, because most of the courses in the first two years of the program were under the purview of the Liberal Studies department, which was still responsible for finding faculty, assessing their performance and generally running each course. The chair was also deeply implicated in Connections for two reasons. First, the stipended faculty as well as both the math and writing instructors were in his department, even though they now also reported to and worked with the corporate programs faculty member. Second, the chair was still perceived as the person who was good at handling day-to-day problems in the program, and some percentage of such problems continued to come his way, just because of his history of solving them.

One outcome of this new situation was that the Liberal Studies chair and the Director of Corporate Programs formed another de facto alliance so that they could both oversee the Connections Program and deal with their now shared faculty. The director of academic services was also a loosely federated member of this new triumvirate, only one of whom, again, was officially affiliated with PacBell and the Connections program.

This story has no neat ending, nor does it generate any profound theory - or at least not yet. What it does indicate, I believe, is that new educational challenges which occur outside the constrained geography of traditional departments and programs create, recreate, construct and deconstruct, jobs and power relationships in ways that are unpredictable, often bizarre, and as often entail reversals of normal power relations. A later paper will deal with the idea that the sorts of adjustments we made were done partly in aid of reasserting traditional faculty power. But that is another topic for another time.

CREATING A CULTURE FOR AN EMANCIPATORY CURRICULUM

Betty Jo McCarty
Linda D. Alkove

In this paper, two instructors explore the classroom empowerment dilemma through dialogue, examining student revelations and re-visiting the video and audio taped data gathered during class meetings for a social studies pedagogy course. Specifically, they define the parallel purposes for empowering the class which evolved within first class meetings. The instructors also define stages of development students exhibited as they either accepted or rejected their own power. Finally, possible solutions are offered to help students grow to the point where accepting personal power and acting on it becomes an important life objective.

During the summer of 1991, two instructors (a professor and a graduate assistant) decided to test the limits of belief-practice congruence. After months of talking about the "emancipated curriculum," they decided to put one into action. This involved placing 23 pre-service teachers in charge of their own learning during an eight-week social studies pedagogy course. Throughout the course, instructors were faced with both resistance and acceptance in their efforts to help students discover the power within themselves. To get a clearer picture of this dilemma, the instructors collected written insights from the students. These insights reveal the struggles of individuals encountering their personal power to affect the course of their own learning, often for the first time.

In this paper, the two instructors explore the classroom empowerment dilemma through dialogue, examining student revelations and re-visiting the video and audio taped data gathered during the formative class meetings. Specifically, they define the parallel purposes for empowering the class which evolved within first class

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meetings. The instructors also define stages of development students exhibited as they either accepted or rejected their own power. Finally, possible solutions are offered to help students grow to the point where accepting personal power and acting on it becomes an important life objective.

The concept of an emancipated curriculum is often more theory than it is action. To most teachers, it exists in the realm of the dreams and is impossible to implement in reality. Research into empowerment, however, indicates that there are few limitations on individuals who have accepted themselves as a potent force, and who have accepted responsibility for their own learning and their own development as persons (Vogt and Murrell, 1990). Within our culture, achieving this state of mind generally entails significant change generated by catastrophic or traumatic life events (Belenky, 1987). For the most part, the power we discover as young children through the exercise of will is often suppressed at home and at school. We are forced to live within norms, and to limit ourselves under the false assumption that to submit to tradition or authority is the "right" thing to do in support of the larger society. For the most part, teacher training has conformed to this model. Pre-service teachers master teaching the same way they mastered driving a car, fully expecting that an expert will transmit what they need to know in terms of a collection of finite behaviors which, when used together, become "teaching." It is the expert's job to impart the knowledge, and the pre-service teacher's job to take notes.

When the student leaves the university classroom and enters the elementary classroom, the problem changes. The checklists provided by the experts don't fit every situation. There aren't enough books. There are too many students. And the university expert is no longer there to tell the teacher what to do. Further, teacher education has taught new practitioners that they must look to outside experts for solutions to classroom problems. Classroom teachers grow isolated in their professional lives and find the answers within themselves.

Teachers need the ability to solve problems with the materials at hand, think critically, and to value the importance of their own ideas and actions. They need to act independently and adjust to changing situations at a moment's notice, and this type of "training" is not normally available in traditional childhood education programs or pedagogy courses.

Methodology and Procedures

When we began the course *Teaching Social Studies in the Elementary School*, we wanted to rectify this gap in teacher training. Our goal was to help our students recognize and appreciate the power within themselves. We wanted them to learn and to create their own classroom environments. As we planned for the first session, we found that this idea actually took two paths; one for the students, and one for ourselves as instructors/action researchers. On the student path, we developed the following objectives: first, we wanted to put the students in touch with their own knowledge of social studies. Then, we intended to widen the student's perception on how the teacher's role in generating curriculum. We also planned to give the students control over a major portion of their learning by building their own syllabus. This gave them the responsibility for determining what was and was not important for them to learn in the course, and for determining their own criteria for evaluation. Our own objectives were centered around the students. We were curious about what the students would do when they were given responsibility for a major portion of their curriculum (the syllabus). We were also interested in learning how students respond to nontraditional ideas for developing curriculum. This was accomplished by instructor modelling, cooperative learning activities, field trips, and guest speakers. Our intent was to bring in as much as possible from environments outside of the textbook, thus sparking their interest in using as many resources as possible (including themselves) while teaching. Finally, we wanted to determine just how much responsibility students would assume to ensure effective interaction in groups.

First Dialogue: Did It Work?

This dialogue took place a few months after the summer semester ended. By this time, the two instructor-researchers felt they had enough time to reflect on what happened, and to relate it to the development of students beyond the class:

Linda: Did you expect the class to embrace the idea of freedom?

Jo: I did because I felt I previously had experiences with students in other classes rising to the occasion.

Linda: I thought they would, too. But from what I observed, we had students who were at various states of readiness for this kind of thing.

Jo: Oh, yes. There was one group who had been exposed to the constructivist philosophy and it seemed they were ready for ownership after "finding their voice" and they felt that someone finally opened the door or gave them the opportunity. Then there was the other group telling us "I don't want to be responsible. I want you to tell me what to do and how to do it."

Linda: Maybe that concept of responsibility is tied to the roles we expect to play as students and as teachers. When we assume these roles, we are actually playing to images in our minds, and we tend to rehearse the things that we expect to happen. I found myself getting away from this and taking it one class at a time, basing what I did during our time on the needs I felt the students were communicating to me verbally or non-verbally. Did you have an image for this class, for what you were going to do and how you were going to do it, or were you in the same track as I was?

Jo: There was no image in my mind of what we were going to do or the areas of concern the students would bring into the classroom. I view curriculum as a "happening." We could talk about it and write about it afterwards, but we couldn't plan it before the students arrived. With some of the students, this didn't fit their idea of curriculum. They viewed curriculum as a road map. They thought we were disorganized.

Linda: I kind of sensed that, too. Yet some of their insights revealed that they were getting used to the freeflow, and some of them came to the realization that we knew what we were doing, and that they could do it, too. Then there were others that seemed to resent what we were doing. They thought they weren't learning because we weren't telling them what to learn.

Jo: That's because what they are saying is they do not want to accept the responsibility for their own learning. They felt it was our responsibility to tell them what to learn. To get their money's worth they wanted us to transmit our knowledge to them so they could regurgitate it out on a test and get their grade. Often, the students lack the self confidence to trust themselves.

Linda: Ah! So some of the students gave us two dichotomous characteristics. They saw us as simultaneously all-powerful and subservient. We were supposed to serve them their knowledge, like waiters in a restaurant. Then we had the power to evaluate their ability to show us they had actually received it. These students were perturbed, but rationalized their way out of their perturbation by assuming it was our fault for not telling them exactly what to learn.

Jo: Remember the concept map that we drew at the beginning of the class concerning the definition of social studies? Everyone was giving us inputs on it, and everyone had their own ideas about social studies. It was all there, but some students didn't have enough faith in their own ideas to release them, to set their ideas free and reveal them to others. They often do not relate the things they know to the things they are coming to know. This is not as important in their minds as taking raw knowledge from experts and imitating it in the classroom.

Linda: You mean using expert knowledge like a checklist? Having all the answers come to you from the outside instead of finding your own answers inside yourself? But this is how we were trained to learn in traditional classrooms. Curriculum is facts, and teachers are experts. What about the people who rose to the occasion, though? We had quite a few.

Jo: For them, their concept of what schooling and curriculum was changed. They saw learning as something very personal and realized that everyone didn't learn the same thing. They saw the teacher as a guide rather than as a transmitter of information. For them, schooling became a social, intellectual, interactive interchange between teacher and student, student and teacher, and between student and student. Those that stayed in the resentment stage didn't see the value in their own ideas and thoughts, or in interacting with their future students. They just saw value in the expert.

Linda: And they saw themselves as striving for advancement to that expert role. The question I have now is this: Are some people studying to become teachers in an effort to increase their own value to themselves and others by becoming experts? Wouldn't they harbor resentment because what we were trying to show them was that their model isn't fully accepted by everyone, and that it possibly doesn't work all that well?

Jo: I don't know. They normally wouldn't have a very good self image at this point, and so I'm not sure they'd see themselves as experts.

Linda: Well, it is because of their self-image that they want to become experts. They're trying to value themselves and to be valued by others, so they want to become experts. Not experts in that they know everything, but experts in a chain of experts. They perceive that a higher expert gives them information, and then they become an expert giving that information to their pupils. There is always a higher expert, giving lower experts his or her knowledge, usually in the way of discrete facts or skills. When you walk into a classroom and say "the students bring knowledge into the classroom with them and they are valuable resources" you challenge this whole scheme and you threaten the value these students have placed on becoming all-knowing within the context of their own classroom.

Jo: Let's get back to the students who were reflective. For the past five years, my teaching has been rooted in the constructivist epistemology and I have observed students go through various stages. I believe I could develop a model for what they went through before reaching the point where they became independent, empowered learners. Stage-change theory is one way of explaining the metamorphosis students experience in the educational setting.

Linda: You said some of them were in your class before.

Jo: Yes. My class, or other classes rooted basically in a constructivist philosophy.

Linda: Would you say this came to your reflective students all at once?

Jo: No. I'd say they went through a process, and that's what I'd like to explore with my model. I've already got the rudiments here (see Figure 1).

At this point, the two researchers took Jo's ideas and, after some discussion and reflection, constructed a model illustrating the development of students who experienced perturbation (Shaw, Davis, and McCarty, 1991) during the course of the semester. Perturbation, as described by Shaw, Davis, and McCarty, is "something that causes a mental dissonance or disequilibrium between what is actually occurring and what ideally should be occurring." In the case of our students, their perturbation was expressed through initial confusion (see Figure 1), and led them to one of two decisions: to rationalize or to reflect.

In the model, rationalization is generated when the student feels as though his or her beliefs and values are threatened, or when the student does not wish to accept responsibility for his or her own learning. Reflection occurs when the student achieves awareness of his or her own ideas and begins to value them. This process begins with self-resentment (as opposed to resentment aimed outside of the self), which leads to self-awareness, and to a willingness to change.

Both the rationalization and reflection processes in this model are cyclic. Students who choose to rationalize rather than change will, in the course of time, become confused again. These periods of confusion provide opportunities to choose, once more, between rationalization and reflection. The same cycle occurs with students who have become reflective. Hopefully, if they have gained insight into their own personal empowerment, they will be able to decide, consistently, to take the reflective path.

Second Dialogue: Rationalizers and Reflectors

The model provided Jo and Linda with a guide for further reflection. After identifying the parallel processes of rationalization and reflection, they decided to further explore the overt characteristics of students choosing either path. They discovered a correlation between the paths the students chose and their stages of knowing as described by Belenky et al (1986).

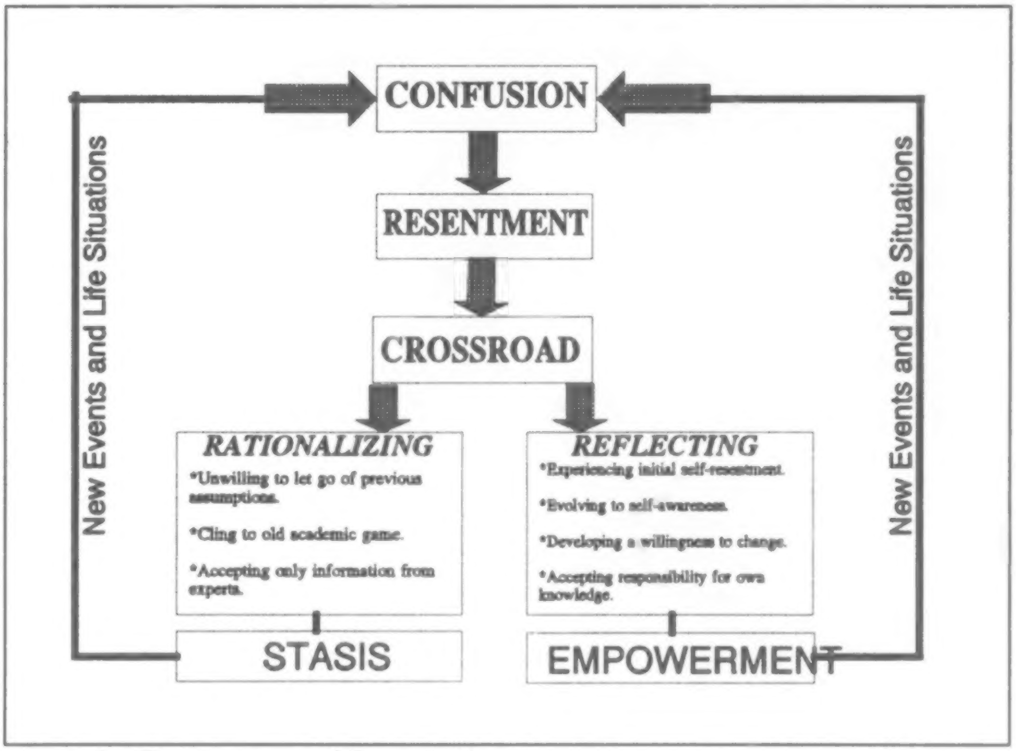
CONFUSION
RESENTMENT
CROSSROAD
RATIONALIZING
*Unwilling to let go of previous assumptions.
*Cling to old academic game.
*Accepting only information from experts.
REFLECTING
*Experiencing initial self-resentment.
*Evolving to self-awareness.
*Developing a willingness to change.
*Accepting responsibility for own knowledge.
STASIS
EMPOWERMENT
New Events and Life Situations
New Events and Life Situations

Figure 7: The Anatomy of Perturbation

In *Women's Ways of Knowing*, Belenky and her co-authors identified five stages experienced by women on their way to self-determination and empowerment. The first stage is described as silence, "a position in which women experience themselves as mindless and voiceless and subject to the whims of external authority." During the second stage, women are received knowers, and as such they "conceive of themselves as capable of receiving, even reproducing, knowledge from the all-knowing external authorities but not capable of creating knowledge on their own." In the third stage, as subjective knowers, women begin to understand that truth and knowledge can be "personal, private, and subjectively known or intuited." From this point, women can eventually become procedural knowers, and as such they are "invested in learning and applying objective procedures for obtaining and communicating knowledge." As they learn, and as they realize the connections between what they know and what they are experiencing, women become constructed knowers. From this position, "women view all knowledge as contextual," and "experience themselves as creators of knowledge."

Within our population of students, those who chose to rationalize appeared to be received or subjective knowers, while those who chose to reflect possessed characteristics and ways of knowing belonging to procedural knowers, or were well on their way to constructive knowing:

Linda: What were the signs that some students chose not to reflect?

Jo: Withdrawal. They were passive, for the most part, and participated in class or group discussions only reluctantly. Their writing was superficial. When they wrote in their insights, they chronicled things they "liked" or "enjoyed" without explaining why. Occasionally, they expressed their resentment in dialogue with other students, who in turn told me about it. These people felt their expectations for the course were not being met. One or two came to talk to me directly, saying "You're supposed to be teaching us and we're teaching each other."

Linda: What were the signs that students were reflecting?

Jo: They participated wholeheartedly. They were opinionated. They were actively expressing ideas and questioning the system.

Linda: I don't remember any of them disagreeing with me, though.

Jo: But you could tell, also, in their insights that they were thinking about themselves and questioning their own beliefs. Here, in Betty's:

"I need to learn to open my mind to the things that are around me, to see what other possibilities there are . . . My terribly narrow mind has been crow-barred open a little further"

Linda: When was that?

Jo: When you brought in the aeronautical charts and passed them out to the groups.

Linda: Oh, yes. I told them to figure out how to use them.

Jo: There's more: She says, "It is amazing how simple things I take for granted can be used in the classroom as lesson plans . . . the maps were used for many different ideas of learning. I will begin collecting maps where ever I go now." She's made a transition, here. She's become a procedural knower.

Linda: If she's a procedural knower, then students who chose to rationalize were probably still received knowers.

Jo: Or they were silent. Especially those who didn't say much at all, or reflect much in their insights. Here's a good example: "I am really impressed with the science computer program . . . (student inserted dots) because it leads to so many avenues. It not only had the children interested in science, it had them interested in social studies also. I thought the program was great. I would love to have something like that in my classroom."

Third Dialogue: Implications for Teacher Training

By the time the summer semester ended, the researchers had more questions to ask than they had started with. Foremost in their minds, however, was to find some way to transfer what they learned to subsequent pedagogical courses. Reflection, Jo observed, seemed to contribute to action and action contributed to reflection. Those students who demonstrated the greatest personal growth when writing their insights also produced the highest quality work. This phenomenon fit the perturbation model, in that the insights which showed the greatest self-awareness and willingness to change were written by the students who took the greatest personal responsibility for their own learning. Reflection, therefore, seemed to be the key to self-empowerment. The problem for us as instructors, now, was to figure out the best way to encourage reflection.

In the past, when we would assign journals and announce to the students they had to reflect, differences in quality of reflection were fairly high between individuals. It seemed we needed to "teach" reflection in a short span of time (eight to sixteen weeks). Subsequent discussion, however, revealed that this is not necessarily the most effective way of encouraging reflection and of helping students develop toward personal empowerment:

Jo: This had been a dilemma for me. How do you teach students to reflect? I tried reflection questions, but those students who are not used to reflecting didn't necessarily change their style of response, while students who reflect regularly complained about feeling penned in. One told me it's like doing work out of a workbook.

Linda: Well, I know from personal experience that you can't push it. But what about those people who do reflect, as you said? Is this their first class with you?

Jo: No. They had me before.

Linda: Or another constructivist instructor?

Jo: Yes. Anyway, they had done journals for my class and for these other classes. And, you know, if I were to read them all now I could show you how they've grown.

Linda: So it didn't just happen in one class, and it wasn't something anyone of you sat down and "taught" them, was it?

Jo: No. In fact, I'd say they didn't start finding their voice until they were well into their second class like this. First, their journal is full of what they like or don't like. Then they start to let you know when they're bothered about something . . . Sometimes it happens slowly, but a lot of times very quickly.

Linda: Some of the students are really making an effort, but they haven't really got there yet. They are actively trying to connect what you do in class to something they already know. The connection may be loose, or just on the surface, but they are not happy anymore with just telling us what their preferences are. They seek depth, but they are hesitant about how to get there. Take this student: "I thought today's presentation was very thorough. I have four children ranging in age from 21 months to 21 years, and I could really understand more about them and the stage they were in by listening to the presentation."

Jo: It's important to see that, because the student is developing to the point that she can trust you with this personal information. Before she arrived at that point, she probably didn't feel free to reflect.

Linda: She was afraid we would grade what she was thinking, how she was thinking.

Jo: That's important, though, because it shows why it takes so long for students to get to this point. Developing that kind of trust takes a long time. The minute an instructor marks a paper or makes a grade on any student's reflection, then that trust is in jeopardy. Betty wrote about it: "Once the trust is established between the teacher and the student, then real learning can take place. You then trust the teacher enough to say what you are thinking and feel free in doing so."

Linda: Would you say, then, that trust is a key factor in helping students decide in favor of reflection rather than rationalization?

Jo: Oh, yes! If you show the student that you can't be trusted, then the student still has someone else to take responsibility for her learning. She begins to write what she thinks you want to read, and gives you full power to assign a value to it.

Linda: How long would you say that takes?

Jo: It depends on the person. I've seen some students open up within a semester, and others take two or three. Some never get there at all.

Linda: But you have students at all different levels in your classes. Some are just starting out, and some really understand the system. Don't you risk losing the opportunity for trust when you introduce a new "game" to students who believe they have mastered the old "game," and value it because of its familiarity?

Jo: It's impossible to demand the same quality and depth of reflection from people who don't understand what it means or what they can get out of it. On the other hand, when I structure the class more rigidly to accommodate the students who don't understand then I risk losing the trust of those who have come to rely on it. It is certainly a dilemma. The best way, I think, is to remember that each student is making a long-term commitment to their teacher education programs -- two to three years, at least -- so it's not like we have to force some sort of change overnight just because we have them in a three-unit course. I have struggled with it, as I said, and the next thing I'd like to try is to coordinate the journal writing and reflections with other instructors. That way, each student has only one journal to write and any instructor can read it and comment on it. The student would maintain the journal throughout her training, and would be asked to read it from time to time and comment on possible areas of growth or improvement.

Linda: To add to that, I think you ought to include periodic discussions in class or with the student on reflection topics that come up. Other people provide me with other ways of looking at myself and my work that are transparent to me, but that bear considerable examination once I recognize them.

Change among these pre-service teachers is not beginning and ending with the social studies pedagogy class. For some, it began earlier as they found their voices within the context of other classes and within the confines of their own reflections. For others, our class provoked the initial confusion required in order to perturb them and bring them to a point of decision between rationalization and reflection. The students taught us as well. We learned to look more closely at our own reflections through their experiences, to seek out the contexts within which our deepest connections are made.

Although we learned quite a bit, our concept of the optimal environment for reflection and change is still evolving. We, as teacher educators, must be cognizant of the crucial elements contributing to perturbation and fostering reflection. By offering the students different models for teaching and learning, we challenged their old images and encouraged them to think of the purposes of "instruction." By insisting that they determine their own needs through a student-produced syllabus, we challenged them to value their own ideas and to view themselves as resources. Finally, by providing an atmosphere of trust and mutual self-respect, some of our students were able to examine their class with a critical eye, and to examine themselves without fear of reproach or sanctions.

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A REVOLUTION IN THE CULTURE OF TEACHING AND LEARNING AT LYNCHBURG COLLEGE LYNCHBURG, VIRGINIA

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Lynchburg College's newly enacted LCSR (Lynchburg College Symposium Readings) Program is proving to be the catalyst for a fundamental change in the culture of teaching and learning at the College and for the institutionalizing of experiential learning across the entire curriculum of the College. Faculty and students alike are learning to accept new roles in the teaching and learning processes. Barriers between individual academic disciplines are falling. A new collegiality is emerging between faculty and between faculty and students that is giving new meaning to the concept of a "community of scholars" that is proving to be infectious and exciting.

Ten years ago, with a few exceptions, Lynchburg College was a traditional, small liberal arts college that was organized along traditional departmental lines that taught traditional majors in traditional ways. Today, the campus is alive with experiential education:

1. An LCSR (Lynchburg College Symposium Readings) Program that requires all students to engage in speaking and writing activities across the curriculum of the College based in part on readings from the College's own canon of the classics. This

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canon is organized around the great themes of human development (such as Faith and Morals, War and Peace, Poverty and Wealth) and draws primarily from the traditional sources of western classical writing, but also includes classical writings from other cultural sources as well.

2. A Knowledge Initiative program that involves widespread utilization of micro-computer technology in the teaching and learning process.

3. A strong internship program with significant academic content under academic supervision.

4. A strong, well-organized voluntary public service program that involves many students, faculty, and staff.

An Overview of the Impact of LCSR on the Teaching and Learning Environment of Lynchburg College

In the above context, LCSR is proving to be the catalyst for a fundamental change in the culture of teaching and learning at Lynchburg College and the institutionalizing of experiential learning across the entire curriculum of the College. This change is:

1. Revitalizing in that faculty are finding that they are establishing a new sense of collegiality with their students. With surprising frequency, faculty are finding that they are gaining fresh insights out of this new relationship with their students. In some instances, it will be a new insight on how to teach more effectively. In other instances, faculty will see something they have never seen before in their discipline or connections between work in their discipline and that of other disciplines. Gradually, faculty are perceiving a new meaning for the phrase "community of scholars," and are reveling in it.

2. Interdisciplinary in that faculty must teach literature outside their own disciplines. For one example, a math teacher developed an exercise based on Malthus' famous *Essay Concerning Population*. For another example, an accounting instructor's students used Plato's *The Republic* and Thoreau's *Civil Disobedience* as they pondered, wrote papers, and discussed questions relating to the auditor's role in the economy and society.

3. Revolutionary in that the program is tearing away the sense of ownership of particular writings by individual fields of academic study. Students now find that they may encounter the same reading in different courses such as history, philosophy, political science, and their senior capstone courses, and that none of their professors are claiming to have the definitive insight on the reading. Consequently, professors and students alike are getting away more rapidly than in the past from the notion that there is one correct answer or interpretation of literature.

4. Transforming in that the concept of the professorate at the College is undergoing fundamental change. Now, the professorate goes beyond traditional lecturing and embraces interactive learning, and a variety of oral and written and other experiential exercises.

5. Enhancing to the development of students in that the program requires them to consider classical writings from different points of view and at different stages in their cognitive and ethical development. In seeking to develop speaking and writing activities, faculty have discovered that certain exercises seem to work better at different stages of student development. For example, in the freshman and sophomore years, students are frequently asked to perform in role-playing exercises that require them to analyze issues as if they were Plato or Aristotle, and to try to think like that person. They find such exercises to be fun, but, very importantly, they also are forced to look at issues from outside their previously developed value systems. As they progress through the program, they move into group exercises that require them to look at problems from a societal as opposed to a personal point of view, and, when they encounter a work in their senior year that they first met in their freshman year, they often find new meaning in it. This kind of programmed development fosters formation of personal and societal-oriented value systems that are more effective for making the kind of increasingly difficult decisions required by our rapidly evolving cultural scene.

6. Infectious in that the program fosters a renewed sense of collegiality among faculty as they wrestle with the problems of making the LCSR concept of teaching work effectively. LCSR faculty are finding that they have a support group for trying to be good teachers in which they can talk about difficulties and mistakes freely without embarrassment. In some ways even more importantly, faculty can talk about successes without giving the appearance of bragging, and there will be colleagues who will be happy for their success because these colleagues understand the difficulties through which they have gone to achieve their success. The comfort in times of difficulty and reinforcement in times of success is helping to regenerate many participating faculty.

The Importance of the Teaching Methods Of LCSR

The primary activating mechanism for the success of the LCSR Program has been innovative learning strategies carried out both inside and outside of the classroom that have been adopted to satisfy the speaking and writing components of the program. These often highly creative learning strategies are at the core of the enthusiasm expressed by teachers and learners and have been the catalyst for what has become recognized as the "LCSR Spirit" on the Lynchburg College campus.

Many of the learning strategies used to satisfy the oral and writing requirements of LCSR are generally recognized by educators as a natural means to motivate learners and to encourage broad student participation in the learning process. These strategies include such experiences as: role plays, debates, short speeches, oral reports, in-class essays, provocative in-class questions, play writing, choric readings, spontaneous improvisations, and so forth.

The imperative of finding ways to use these techniques in connection with readings from the SR (Symposium Readings) canon in courses in all fields, including such fields as music, math, and accounting, is what makes LCSR unique. For just one example, in Music for the Secondary School, students working in teams were required to select from SR readings representing several philosophical stances: *Politics* by Aristotle, *The Republic* by Plato, *Emile* by Rousseau, *Experience and Education* by John Dewey, *The Aims of Education* by Whitehead. Each team was expected to become expert on the philosophical view of its great thinker. Classmates asked questions of each other so that all students understood the basic premise of each thinker being considered.

Students were then given the following assignment:

> Scenario: Just last week the Virginia State Board of Education announced that music education will no longer be included in the regular curriculum of Virginia public secondary schools. Henceforth, all music offerings will be considered as extracurricular activities and must be scheduled before or after regular school hours.
>
> Activity: Prepare a defense for the continued inclusion of music education in the regular curriculum from the philosophical stance of the philosopher that you represent and then present your defense before the "State Board of Eduction." You may want to include such concerns as: the role of the teacher and learner; what the curriculum

should include; how the students would learn music best; how learning should be assessed.

The professor functioned as the Moderator of the Board of Education and announced the appearance of these great thinkers or their representatives. Some students appeared in costumes and with props. Each speaker or group of speakers sought to persuade the Board of Education to reconsider its edict. Appearances included: Professor Rousseau and his student Emile, a student of John Dewey, Dr. Whitehead, Aristotle and his wife, and Plato. All presentations were true to the essential philosophical views of the **great thinkers** and addressed music education issues in a direct and often humorous fashion. The professor, as moderator, responded to each presentation and reflected what the imaginary board might think. Gradually during the course of the presentations, the board was convinced that music education has a rightful place as a part of the core curriculum in public schools. The session was video-taped and later discussed by the class.

Enthusiasm for teaching has blossomed among faculty as such innovative learning strategies have proven successful. Students tend to be highly motivated to prepare and take part in the assignments. Generally, many students are hesitant to speak in class and prefer the traditional setting in which the professor lectures and they take notes. However, extensive use of such techniques as the one described above has provided a stimulating intellectual setting. Perhaps the greatest surprise to participating faculty has been the **bonding** that often takes place in class among students and their professor. At the end of the term, many students have expressed regret that such classes have to end and have sought ways in which they could maintain the intellectual and emotional **bonding** that has emerged. The enthusiastic and energetic classroom learning environment that is the end result of these kinds of innovative learning strategies is a professor's dream.

The Reaction of One Traditional Lecture-Method Teacher To Becoming Involved with LCSR

My journey from using a traditional, controlled lecture technique to using a more open discussion LCSR format has been a life-saver in my teaching career.

I began my career in 1964 as a graduate teaching assistant. I used the lecture technique because it was the only model that I had experienced, and because I had only one teaching goal: to fill the hour. When I arrived at Lynchburg College in 1969, I had clearer ideas about what I wanted to accomplish in the classroom. I wanted my students to: 1) master factual information; 2) develop writing skills; and,

3) develop critical thinking skills. Essay examinations and stimulating lectures were to accomplish these goals. In addition, I was insecure and feared that some student might discover a weakness in my knowledge by asking a question that I could not answer. Absolute control was my solution to this problem. No student dared to ask a question in class. I ended each session with the perfunctory statement as I hurried out of the door: "Are there any questions?" I filled my classes with a torrent of words, polished jokes, quotable quotes, beautiful "connections," and incisive insights. These actions were justified under the conviction: "I have to cover the material." I was blissfully unaware of the gap between my goals and what was occurring in the classroom.

Somehow, most of the students were not operating to my expectations. Memorize, they did. But, to my thinking, they were not "thinking." The connections that they made were only the ones that I had given them in my lectures. I tried harder. I polished my lectures, controlled my classroom, and put in my time; but I was bored with my teaching experience and complained to anyone that would listen about how poorly prepared my students were.

LCSR changed that attitude. In the spring of 1988, I joined a pilot program which included my freshman civilization courses. I became excited again. Here were the elements that I needed: 1) readings to give my students something to discuss and provide a basis for making connections; 2) writing exercises to develop their writing skills; 3) techniques to give them practice to develop their critical-thinking skills; and 4) a support group for me to whom I could air, discuss, and exchange ideas, successes, and failures. At first, it was difficult and scary to give up both the idea that I had to cover a set amount of material each class period and absolute control of everything that went on in class. I have made these changes gradually.

These changes have not been without some pain and lack of success. It has been as if I were starting over as a teacher with all the insecurities and fears of failure that I had in those early years. But, now I look forward to class each day. My students are beginning to meet the teaching goals that I have set for them. Some even enjoy the civilization course. I have become more open to suggestions about new techniques from both my colleagues in LCSR and my students who are no longer timid in this matter. The techniques that have proven successful in my LCSR classes are beginning to creep into my other teaching assignments. Whereas I once dreaded the years left in my career, I now embrace them.

The Reaction of One Student To Becoming Involved With LCSR

Student concern about the learning process in higher education is mounting. We see problems in a lack of motivation on the part of American students and in an increasing apathy on the part of American teachers. In this context, Lynchburg College students look with pride to the LCSR program implemented by the College as a pilot program three years ago and now adopted as a requirement for future LC students.

As a junior at Lynchburg College, I have been exposed to several LCSR classes and the benefits that I have reaped from the style, format, and content of these classes are immeasurable. I am proud to be an LC student as I see the LCSR Program as a truly unique and innovative way to tackle the problems facing higher education today. This program provides an interactive arena for learning, a rare commodity today. The style of the LCSR classroom allows students and teachers to challenge each other's views actively and transfer a plethora of information in the process. The student in an LCSR class is not allowed simply to stare at the back of someone's head. This type of classroom demands equality among participants who must prepare for class in order to excel in day-to-day activities. In addition, the format of the class allows students to improve their speaking, debating, and writing skills as they are forced to articulate their ideas both aloud in class and on paper.

The real beauty of an LCSR classroom, however, is the type of learning that results. In a traditional classroom, the teacher typically lectures and the students take notes. The students are not asked to interpret information for themselves and are not encouraged to form or articulate ideas. In an LCSR class, the teacher relinquishes sole control over the class and merely provides some guidance to understanding difficult texts and then acting as a catalyst to start discussion among the students. From the discussions, debates, and even arguments that follow, something revolutionary happens in this kind of classroom: the students learn the material thoroughly by discussing it themselves and are forced to form individual interpretations of the texts which are often quite insightful and always the result of their own active participation in the learning process. This kind of learning, I propose, is **true learning**. No longer are the students just dutifully copying down what the teacher says the text means, its significance, and why they should know it; regurgitating this information back on an exam; and then forgetting it. No longer are teachers able to teach from a set format that does not encourage the students to look at the text from many different perspectives. The LCSR method is so unique because it requires the students to teach themselves by looking at issues from outside their usual experiences and, as a result, questioning and challenging some of their beliefs. Almost inadvertently, but very importantly, they learn the material under discussion quite well.

I speak from personal experience in all the ideas I have articulated above. In my three years at LC, I have seen a consistent improvement in my academic skills and an enormous change in my personal self-confidence as I have become comfortable in sharing my ideas and opinions with my peers in class. The LCSR classroom holds its students accountable for their own learning, and I believe that this characteristic has encouraged me and many others to develop greater skills of independent thinking. I am at a point now where I no longer am in school only to obtain the qualifications to be a teacher. I have been empowered by the LCSR program to learn for myself, and the degree is simply a result. This joy in education and knowledge is what higher education in America needs. I believe the LCSR program is a gigantic step in the right direction.

Conclusion

Experiential learning is now well entrenched at Lynchburg College. Approximately sixty per cent of this year's senior class report that they use micro computers regularly in their work which is considerably above the national average, and they did not enter under the College's Knowledge Initiative Program which subsidizes student purchases of their own computers. One-fourth of this year's seniors have performed one or more internships under the supervision of regular teaching faculty. Over half of this year's seniors report community service activities.

As dramatic as these results are, however, until the advent of LCSR, many of the classrooms of the College remained isolated from the experiential explosion. The impulses generated by growing public service work, utilization of internship opportunities, and use of microcomputers did not always have the impact on the development of reasoning and communication skills that one might have expected. These impulses were dulled by the traditional teaching and learning culture of the College.

In three short years, however, the LCSR initiative has broken down the barriers between the classroom and experiential learning outside the classroom, and promoted the kind of development of reasoning and communication skills and refinement of value systems that one would hope to see in such an environment. In senior symposium, when the discussion turns to the problems of the poor, varsity-athlete types talk in moving terms about how men reduced to homelessness cannot interview effectively for a job because their clothes are dirty and they smell from the lack of an opportunity to bathe properly. They have known such men up close and personally because they have been with them and tried to help them. Young ladies from prim and proper homes describe the problems faced by unwed mothers with whom they have worked and reveal a new understanding of the difficulties such women face in our society today.

The real joy for instructors comes when over eighty per cent of a class with practically no prodding from the instructor can and will engage in a very open, candid, and effective discussion of a question like: "How important is it to reach a stage in life when you can discover and say that I like myself, who I am, and what I have been?" There still remain a few shy ones, but even they are enticed to speak from time to time. Very importantly, the percentage of women students who are willing to talk in class is rising to match that of men.

Writing skills have risen considerably in the last two years as LCSR has taken hold in the classroom. There is greater structure to student writing. The students' personal value systems are showing through more clearly. Very importantly, the writing skills of the men students are beginning to catch up to those of the women students.

The end result is that instructors of senior capstone courses can go further in their development of their students. The students enter the senior year more accustomed to speaking in class. They have a greater capacity to explain themselves in writing. The instructors no longer have to concentrate on building such basic skills and can move on more quickly to working to achieve other goals more appropriate to senior course work.

THE EVOLUTION OF A WRITE TO LEARN PROGRAM: AN INTERDISCIPLINARY FACULTY PROJECT

Mary Anne Palladino
Janice Rowan Poley

The Write to Learn Program at Glassboro State College developed as an outgrowth of the College's curriculum revision in general education. An interdisciplinary and collaborative faculty project, Write to Learn made effective use of faculty networking, empowerment, and involvement. This description of the evolution of the program shows how a strong philosophical foundation, the use of the faculty as a power base, and a carefully developed sequence of activities effected a successful program on our campus.

The founding principles of the Glassboro State College Write to Learn (WTL) Program are networking, empowerment, and involvement. From its inception in 1989 to the present, the program has derived its strength from the fact that it was faculty initiated, that it is faculty administered, and that the spreading of the gospel of writing across the disciplines is accomplished by faculty. We believe the program's success is the result of initial networking among faculty, gradual empowerment of faculty to determine the course of the program, and extensive involvement of various segments of the faculty across the disciplines.

Write To Learn: Formative Activities

The WTL Program directly grew out of an investigation of how to improve our general education model and out of our efforts to liberalize key courses in the College's three largest major areas. As the program evolved, it became a major

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movement to foster changes in pedagogy in both general education courses and courses across the disciplines.

One part of our effort to liberalize professional education was to work with select groups in Business Administration, Communications, and Teacher Education. All three groups arrived at the conclusion that writing, speaking, and critical thinking must be reinforced throughout the curricula and that these skills were essential to liberalizing the professions.

In May 1988, Dr. Minna Doskow, Dean of the School of Liberal Arts and Sciences, sponsored a week-long faculty development workshop which was attended by approximately sixty faculty from across the disciplines. As one component of the workshop, Janice Poley and Mary Anne Palladino presented a session on writing which concentrated on the following:

How to assign writing
How to incorporate many forms of writing into a class, such as freewriting, journals, summaries, and short answer essays
How to grade holistically and how to give a variety of feedback, including peer review

During the next academic year, Mary Anne Palladino conducted a series of writing workshops for the School of Business. These sessions focused on assigning and evaluating writing. The faculty who attended these first workshops later became some of the most involved participants in the GSC WTL Program. In fact, in the second week-long faculty workshop, spring 1989, it was not writing faculty but these converts who served on a writing across the curriculum (WAC) panel and shared their writing activities in business, sociology, and science classes. This participation from across the disciplines gave greater credibility to WAC goals and indicated a growing campus-wide interest in WAC.

Workshops were not our only activities. We also sponsored visiting experts and faculty travel. For instance, in spring 1989, we invited University of Vermont's Toby Fulwiler, expert on writing across the curriculum, to address our faculty and administrators on how to begin and to sustain a WAC program. Dr. Fulwiler also conducted a day-long workshop which sparked faculty interest in journal writing and provided an impetus for the first phase of faculty involvement in WAC.

In summer 1989, we sent Dr. Pearl Bartelt, a member of our Sociology Department and currently our Acting Dean, to a WAC conference at Martha's Vineyard where she developed a productive professional relationship with Anne

Herrington of the University of Massachusetts. The following spring Dr. Bartelt and Dr. Herrington co-presented a workshop to our faculty.

We also sent the two future faculty/administrators of the WTL Program to the International Conference on Critical Thinking in Sonoma, California.

Write To Learn: Phase One (1989-1990)

Philosophy and Goals

In the summer of 1989, the Dean of Liberal Arts and Sciences funded a WAC initiative on the campus by investing a small portion of the large Challenge Grant the College had received to liberalize professional education. The dean appointed Mary Anne Palladino WAC coordinator. One of the first strategies was to make the program truly interdisciplinary and to dispel the notion that the program was the province of the writing faculty alone. Mary Anne identified ten distinguished and highly visible faculty and invited them to serve as members of the program's steering committee. As a first step, this group determined the program's philosophy:

> Academic writing is not something students do as an end in itself and merely to improve their proficiency. Students write in all disciplines because writing helps them to focus, to sharpen their thinking about the subject matter. It forces them to grapple with the chaos of ideas and to formulate those ideas into appropriate language.

The committee also set three goals. As a result of WAC activities, faculty will teach more effectively and students will

Think and learn better
Develop into more mature writers
Manage language and ideas in specific disciplines more proficiently

Thus, WAC at Glassboro became the Write to Learn Program.

Initial WTL Activities

One of the first activities of WTL was to survey faculty interest in writing to learn. From the survey, we learned the following:

Most faculty wanted to interact with colleagues from various disciplines.

Half of the respondents wanted some sessions devoted to their specific disciplines.
Overwhelmingly, faculty preferred 2-3 hour programs to all-day programs.
Respondents designated Friday as the best day for workshops on our campus.

These findings have guided us in planning our program over the last few years.

After completing the survey, the steering committee began networking. They visited department meetings across the campus, explaining the WTL Program and its goals and recruiting interested faculty to join in the activities. They also planned the spring 1990 program, which included a WTL overview workshop conducted by Dr. Dixie Goswami of Clemson University. Fifty faculty attended this kick-off for WTL.

A second workshop featured Anne Herrington, who discussed revision as a class responsibility, designing and critiquing assignments, and informal writing for learning. A faculty panel, led by Dr. Bartelt, included colleagues from science, art, and law/justice and focused on formal classroom writing assignments.

Also, in 1989-90, the WTL coordinator initiated *Write To Learn Notes*, a newsletter containing articles about WTL activities and pedagogy. Now in its third year, *Notes* often features articles by faculty across the disciplines and serves as an excellent medium for faculty development.

The culmination of that year's activities was a retreat. Fourteen faculty from across the disciplines spent two days at the Chauncey Center at ETS in Princeton, New Jersey. Consultants included a psychologist from Beaver and a philosophy professor and WAC Coordinator from Upsala College. The program dealt with the theoretical background and practical applications of writing to learn.

A highlight of the program was the marathon discussion which began Friday afternoon, broke for R and R (jogging, biking, walking, and tennis), and resumed in the evening. The retreatants agreed that this experience was what collegiality was all about—a group of faculty focusing on an issue, sharing ideas, presenting problems, and proposing solutions in an open, relaxed atmosphere. One of the participants described the experience this way:

> A two-day retreat, with colleagues, allowed real change to happen with me. I also found the experience something of a morale builder; I think others felt the same. Further, the retreat suggests a way to make change at GSC.

It was indeed a productive session. From the discussion was born the WTL Resource Staff. Each of the retreatants agreed to become a resource staff member, to pilot a WTL project in class, to meet once a month to discuss these projects, and to present these ideas to colleagues in workshops in the spring 1991 semester. Admittedly, this retreat was expensive but, we believe, cost effective: these retreatants remain the energizing force behind the program.

Throughout the development of our WTL Program, we tried to keep abreast of current trends in writing, critical thinking, and WAC. Therefore, in the summer of 1990, three resource staff members attended the University of Chicago's Institute on Issues in Teaching and Learning.

Write To Learn: Phase Two (1990-1991)

Resource Staff Luncheons

WTL luncheons became a special feature of the program in its second year. At these gatherings, WTL Resource Staff members made in-progress reports on the WTL projects being conducted in their classrooms. For example, Dr. Ron Czochor, a mathematics instructor, discussed the insights he gained from reading his students' journal entries about their understanding of mathematics theory. In his article based on this project, Dr. Czochor says:

> It seems to me if "writing to learn" is to be effective, it must be incorporated into the course from day one, and students must know the importance placed on the results of these assignments. Only in this way can we ensure that our students will start to study mathematics using the questions "why?" or "when?" as well as "how?"

Other Activities

Fall 1990 also saw the first edition of *Occasional Papers*, a collection of essays and notes written by GSC faculty. This first edition featured pieces about writing by faculty from Business, Communications, Education, History, Philosophy/Religion, Psychology, Reading, and Sociology. This publication was one of several pieces of tangible evidence that WTL activities had had an appreciable impact on our faculty. Contributors to *Occasional Papers: On Writing* demonstrated that they had absorbed and could apply what they had learned about the writing process, about its connection to critical thinking, and about pedagogy to promote learning.

Two workshops and a second retreat to Princeton highlighted the spring activities. The first workshop, "A Different Kind of Prose," dealt specifically with writing in science/technology/business. "Grammar Stress Syndrome," the second program, dealt with English usage problems and grammar checkers. This session was requested as a follow-up to a grammar test in an issue of *Write to Learn Notes* and attracted not only faculty, but also non-teaching professionals from across the campus.

Two major curriculum advances at GSC further demonstrated that WTL had indeed taken hold. In spring 1991, the Faculty Senate passed a revised General Education model which requires all students to take a second semester of freshman writing, as well as at least one Writing Intensive (WI) course during their undergraduate careers.

Write To Learn: Phase Three (1991-1992)

Writing Intensive Initiative

The WI requirement provided the focus for Phase III WTL activities. The program's second coordinator, Janice Poley, has shaped the WTL Program into a support system for the implementation of the WI requirement. In fall 1991, the program sponsored a workshop to demystify the concept of WI and to clarify how the new requirement might be carried out on our campus. Dr. Mimi Schwartz and two of her colleagues from Stockton State College conducted a workshop for about thirty-five GSC faculty. In addition, *Write to Learn Notes* this year has continued to probe the issue of WI on our campus. The coordinator is also serving on the Senate subcommittee reviewing WI course proposals. Finally, WI will be the subject of this year's two-day retreat. Participants will review their course proposals and begin to infuse WI activities into their syllabi.

Continuing Activities

Other WTL activities included a continuation of the luncheon meetings, one of which dealt with collaborative learning. We also sponsored a spring workshop conducted by Dr. Pat Belanoff of SUNY, Stony Brook, on responding to student writing. A topic of enduring interest to our faculty is how to give students appropriate feedback without getting buried under the paper load.

The WTL Program sponsored three publications this year. Besides the newsletter, we supported two collections of writing: *Occasional Papers*, essays on teaching in the sciences, and the premier issue of *Glassworks*, a collection of superior student essays from across the disciplines. Both publications share the goal of supporting writing across the curriculum.

Concluding Remarks

We would now like to share with you our perceptions of what worked for us in developing this program, and what emerged as problems and pitfalls.

Positive Outcomes

Faculty and students evidenced significant attitudinal changes about the place of writing in the curriculum.
Students produced more focused and purposeful writing.
Faculty re-examined their pedagogy.
Faculty enjoyed enhanced collegiality.

What worked for Us

Faculty Involvement

Targeting the right faculty for leadership
Inviting faculty from all disciplines to participate in every phase
Making sure writing faculty share the spotlight with disciplinary faculty and outside consultants

Faculty Empowerment

Group decision-making
Distributing leadership
Publishing the work of innovators
Using disciplinary faculty as workshop leaders

Faculty Networking

Developing lines of communication (e.g., word of mouth, Steering Committee, Resource Staff ambassadors, Write to Learn Notes)
Developing credibility by adhering to high standards
Maintaining a constant presence in the college community

Administrative Involvement

Providing an administrative framework for the program (budget, secretarial support)
Allowing faculty to determine the shape and content of the program
Having the Dean actively participate in the program

Cautionary Comments

While it may appear that our WTL Program developed without problems, we must admit that all did not always run smoothly. Therefore, we offer here some suggestions, gleaned from our experience, for avoiding potential setbacks:

1. Seek participants from all segments of the college community (senior faculty, the newly tenured, probationary faculty).

2. Establish groups, such as a Steering Committee, with membership from across the campus, and continue to add members, such as a Resource Staff for programmatic outreach.

3. Pursue a limited number of goals. Don't try to do everything all at once.

4. Try to find seed money from a grant or some other source.

5. Keep faculty involved by using a one-on-one personal touch (phone calls, thank you's, etc.).

6. Focus on one key project per semester (e.g., expressive writing, writing intensive, writing for business).

7. Keep an eye on the pay-off for students. How are activities finding their way into the classroom? Build in some sharing sessions so that faculty can describe what they are doing and encourage each other.

8. Audition workshop speakers.

9. Be prepared for attrition. Some faculty will remain with the program; others will be drawn away by other commitments.

10. Be prepared for the program to take time, perhaps several years, before it reaches its fullest development. Don't let funding or participants disappear before the program has been given a real chance.

If any of our colleagues are interested in beginning a WTL Program on their campuses, we would be happy to share our materials and additional details about our experience. (Glassboro State College is a multi-purpose public institution with an enrollment of approximately 9500 full-time and part-time students.)

CREATING LEARNING COMMUNITIES

IMPLEMENTING NEW CURRICULA: COPING WITH THE PAIN OF CHANGE

Kenneth Edward Christiansen

The implementation of interdisciplinary programming is often accompanied by considerable activity that would classify as resistance to change. This paper explores the use of a grief and grief-work framework for understanding the intense hostility that frequently occurs when change is suggested or implemented, along with a strategy for dealing with the needs of person(s) expressing hostility as opposed to reacting to the hostility itself. A section on leadership differentiates between "understanding support" and "political support" as administrative options, delineates some of the effects of each and combinations thereof, and ties back into grief and grief-work theory at the point of suggesting an appropriate balance between the two kinds of support for a new project.

The implementation of new curricula by its very nature involves change in at least five areas: 1) the definition and rank ordering of institutionally accepted priorities and goals; 2) the deployment of individual time and energy; 3) the patterns of collegial relationships; 4) the perceived meaning and importance of individual efforts; and 5) the public face of the institution. As much as the implementation of planned change may bring potential for growth in each of these areas, it also brings potential for pain to an institution and its members. Numerous expressions have been coined over the years to articulate this reality. The idea of "no pain, no gain" has become a cliche of popular psychology. John Bradshaw extends this concept, when talking about making a new adjustment to life, by suggesting that "The only way out is through [the pain]."[1] Kahlil Gilbran gave this concept one of its most classical and optimistic statements in the words, "Your pain is the breaking of the shell that encloses your understanding."[2]

Pain is obviously not something to be sought after for its own sake -- not for an individual and certainly not for an institution. Nonetheless, it cannot be avoided

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merely by wishing it away. Graceful management of institutional change requires sensitivity and understanding in relation to the legitimate origins and manifestations of the accompanying pain.

Change itself has numerous components. The philosopher theologian Paul Tillich identified a basic polarity in relation to change: that the creation of meaning is always accompanied by the destruction of meaning.[3] The supplanting of the old by the new is never a benign process. There is loss as well as gain. Some of the emotions that result are the emotions of loss, which are commonly termed "grief."

Toward an Understanding of Grief[4]

Grief is a common human emotion -- one of the most common. It is also, at least potentially, one of the most painful and debilitating. No human being is immune to grief feelings, even though the force of the emotions, and our reactions, can vary as widely as with any other emotion.

What is grief, and how does the concept apply in this situation? Grief is a normal, natural, and somewhat predictable constellation of emotions in response to change, when the change in question is perceived as loss. The fact that significant changes in social institutions of which one is a part can bring on grief reactions is a well-documented reality in social-scientific literature.[5] The British sociologist, Peter Marris, in the book *Loss and Change*, writing about the reactions of former colonists to the withdrawal of Britain from several of its former colonies, makes the case that we all depend on life being predictable. This dependency leads most people to be very conservative about some minimum number of concerns that are important to them.

This is perhaps most obvious in terms of the physical environment. Marris asserts that we couldn't survive even a short period of time if spacial relationships weren't predictable.[6] When you open your office door, what do you expect to find outside? What if it changed every day -- one day being the usual hall floor, the next a steep cliff leading to a river several hundred feet below, and the following day an ocean with a sandy beach and three-foot surf? We laugh. But if it happened, it wouldn't be funny.

Marris affirms that patterns of knowledge are equally important. He says, "there is a deep-seated impulse in all of us to defend the validity of what we have learned, for without it we would be helpless."[7] As adults, our sense of how things should fit together "builds on what has gone before." As teachers, we perhaps accumulate more knowledge than people in many other occupations, and we strive hard to keep it in some systematic order. When things happen that force us to change our approach to intellectual matters such as curriculum and/or teaching strategies, there is a lot to sort out. This is an emotional as well as an intellectual process.

Marris talks in terms of both a "conservative impulse" and of "grief," and sees the two as related. The conservative impulse manifests itself in "an intolerance of unintelligible events," i.e., a fear or loathing of -- or hostile or destructive attitude toward -- that which causes the individual to feel he or she can no longer make accurate predictions about what is coming next.

What then is grief? To Marris, "Grief. . . is the expression of a profound conflict between contradictory impulses -- to consolidate all that is still valuable and important in the past, and preserve it from loss; and at the same time, to reestablish a meaningful pattern of relationships, in which the loss is accepted."[8]

A Case Study

Those who advocate institutional change generally approach their projects with considerable positive energy. The vision of the new is a driving force that carries them through adversity. What about the individuals who grieve the loss of the old rather than celebrate the new in the context of the implementation of new curricula or other institutional change(s)? Can we get inside of their feelings as well?

The following quote is taken from the responses to a survey administered to faculty members involved in curriculum change efforts at a small college in Ohio. In a field where most of the responses gave a very positive appraisal of the individual and institutional growth that was taking place, the following quote articulated the experience of another reality. The respondent had recently participated in a six-week Summer Seminar exploring the development of a new interdisciplinary course that would replace certain existing required courses. Professor X said:

> I have come to a point that I am not certain that all of our basic courses need to be delivered via some type of integrated core. It is particularly painful . . . to see my special course (the area of my greatest expertise) . . . reduced to a unit in a core course. . . . It is painful to know that a unit in [my specialty] will probably not present enough material for any one to understand [my specialty] adequately or to make any valid, reasonable judgments about [it] except at the most elementary level. It is also painful to grapple with units [in subject matter outside of my specialty] . . . as I try desperately to understand

> [those areas] when I myself have had little instruction, training, or . . . experience with those [areas]. . . .
>
> What is the impact as a faculty member? Anxiety! Anxiety because I am getting ready to teach bits and pieces of subjects I have never studied. Anxiety because what I am prepared to teach is being diluted to a unit in an entire semester's course. And anxiety because this diminishing of my discipline augers elimination of . . . coursework and programs [in my specialty]. This situation is not only filled with anxiety, but it creates depression, disillusionment, distress, and disagreements. It is frustrating and confusing.

It is always a precarious enterprise to give a name to someone else's pain. At least two things are going on in this quote. One is the expression of a set of judgments about teaching strategy. The second is an extremely articulate venting of an acute sense of loss. Anxiety, depression, disillusionment, distress, frustration and confusion are all components of grief. What is being lost? The familiarity of a disciplinary framework. A sense of control over one's own professional life. A sense of the pre-existing adequacy of one's own preparations for teaching. The security of the familiar.

Insofar as curriculum change projects or other institutional changes bring about real feelings of loss, psychological models of "grief" and "grief work" can be brought to bear in the analysis of individual responses and in strategizing for institutional action. The following sections address these subjects.

Personal and Corporate Factors in Grief Resolution

Eric Lindemann, a psychologist who worked with about a hundred families of victims of a major night-club fire in New Jersey in 1943, did much pioneering work toward understanding how grief feelings manifest themselves -- and how to help the victims of loss.[9] Lindemann describes normal grief reactions as including intense feelings of physical shock; denial of reality; hostility directed toward a few or many people; short- or long-term bargaining for a return to the past; depression ("grieving") over what has happened; and eventual acceptance of reality. Grief is never a pleasant experience.

The intensity and duration of grief reactions can and do vary in relation to two major factors, which are affected in turn by numerous additional considerations. One major factor is the actual impact of the change(s) on the affected person's life, relationships, or customary habits. The second is the willingness, ability and/or opportunity of the person to engage in formal or informal "grief work." In the institutional setting, additional considerations are the specific approaches taken to change implementation and to conflict resolution on the part of the leadership of the institution.

The first factor is obvious. For example, the death of a spouse should, and usually does, affect a person much more deeply than the death of a distant cousin or a change in job realities or a move to a distant town. Likewise, being asked to teach a class one has never taught before, or a class partially outside of one's own discipline, can predictably cause significant emotions, but probably less so than being fired. The intensity of these reactions can vary from minor distraction to crippling emotional trauma.

The second factor is less obvious. No one is immune to grief. Yet individual reactions vary greatly, and last different lengths of time. It is logical to ask, why does one person appear to move gracefully through a series of changes while another denies reality, seems to be in an eternal, inappropriate rage, and/or swings uncontrollably in and out of depression -- while another person finds the extra time and energy demands called forth by the change stimulating?

On the negative side, rage is one of the most difficult and perplexing emotions to deal with in the workplace, particularly when the personnel in question are tenured. And hostility frequently crossing the border into rage is common with grief reactions.

From the perspective of institutional leadership, the discussion needs to move to the "what can be done" level. In the culture of the workplace where significant curriculum change is being implemented, we commonly encounter subgroups that openly and aggressively share with anyone the feeling of being overwhelmed, outraged and scandalized by the change. This is true no matter how much time and thought, even group effort, has gone into the planning. Assuming that the decision is firm that the change is going forward, those in leadership positions in the life of an institution need a strategy for helping those who are calling for a return to the past to find a new source of energy in relation to the present and future.

Grief Work: Some Constructive Directions

What is "grief work?" The idea was first defined by Eric Lindemann in the study cited above. It is one way of expressing what a person must do, or go through, in order to make a healthy adjustment to reality after enduring a loss. Lindemann's pioneering work was with personal grief in the face of tragic death experiences. The same basic principles apply in the face of other losses, however. What follows is a summary of necessary activities or stages of "grief work," followed by applications of these concepts to situations faced by leaders of institutions where change is being implemented.

The three steps of grief work Lindemann described include, first of all, "EMANCIPATION FROM BONDAGE TO THE PAST." This is accomplished through building a realistic picture of what was lost so that feelings about it don't just keep coming to the surface and overwhelming a person and/or negatively influencing his/her behavior. A key positive process here is talking -- actually communicating with another person (not just to oneself) -- about the images, the conflicts and the hurts, that well up inside as a result of the proposed or implemented changes. Talking about past realities when one is overwhelmed by feelings about them is both difficult and consequential. Even for those who perceive themselves as doing a lot of "talking for a living," communicating about the private realities of loss in the midst of a curriculum change project is going to involve and release a lot of pain. Why do it? Why acknowledge the losses one feels personally? In somewhat simplified terms, this process of talking with another about the changes one perceives as loss can be visualized as helping to move psychic energy from the part of the personality that feels to the part of the personality that remembers and can process new realities.[10]

The second step Lindemann describes is "BUILDING A REALISTIC PICTURE OF THE PRESENT WHERE THE PAST IS MISSING." This may seem simple enough. In the world of emotions, however, it is not. In brief, it means sorting out what is left in the present as a result of loss and change, or as the process of change continues. A grieving person often feels like he or she is standing on shifting sand--as though nothing in the present is definite or lasting. At least one root for this is the emotional pain experienced when looking objectively at the present and facing what really is and is not there. Again this involves pain, but the potential payoff is high. What is at stake is a personal acceptance of the legitimacy of the present on the part of individuals who strongly appreciated the past, and understandably need to grieve its loss. Only after accepting the present can one's energy be fully engaged in accomplishing the goals of the present and future.

Lindemann's third stage is "FORMING NEW RELATIONSHIPS" --relationships that meet the needs left unmet with the loss of the past. Those who relate to an institution through a change or loss, whose lives or work-patterns have been deeply affected by the change or loss, still have needs. How will those needs be met in the new situation? This is a highly legitimate -- and highly emotional -- question that has both institutional and personal dimensions. Communication, time, incremental planning, and a lot of listening are all necessarily involved in the structuring of new collegial relationships that support the new realities. Very little of value can be done quickly.

The stakes, then, are very high for the leaders of an institution undergoing change to take into account the normal and natural feelings of grief experienced by all connected with the life of the institution -- even as they publicly recognize the value and/or necessity of that which is being created. At the base level, leaders need to participate in many discussions of the realities of the past and present, and to help provide time for others to do so as well. Insofar as possible, there needs to be a recognition of the purposes formerly served by whatever it is that is coming to an end, along with extensive discussion of present and future realities. Beyond the base level there are additional challenges, not the least of which is the question of how to cope with the feelings of those inside and outside of the institution whose emotions about the change are operating at the level of rage.

A Note on Coping With Personalized Hostility

At the risk of being repetitive, it is important to acknowledge that grieving people are normally very hostile toward perceived change agents. In terms of grief, hostility manifests itself not necessarily because of anything anyone did -- but rather because of the pain of loss and change that one has experienced -- or perceives that he or she must yet undergo. In other words, much, or most, of the hostility that is present in a social or institutional change situation is not at root personal, even though it may be, and frequently is, personalized.

A useful insight growing from the above observation is that in a grief situation, one should not take the hostility that arises personally. One should rather let the hostility go by and deal with the underlying denial. Ideally this means forestalling the usual tendency to move away from persons expressing hostility about perceived losses and moving closer to them emotionally instead. The stages of "grief work" described in the previous section are very helpful here. It is highly appropriate, when faced with expressions of pain and hostility in the midst of change, to ask questions or make statements that move toward building a realistic, commonly held, picture of how things came to be the way they are, why the change was planned and is being executed, and what the implications are for each member of the community. This approach will necessarily acknowledge the pain of the change (which may be why we sometimes avoid engaging in these discussions), and can strongly reinforce both an accurate understanding of the present and a basis for new, more productive relationships.

Leadership Politics in the Midst of Grief

Hostility and rage are feelings frequently encountered as people experience grief, as described in the previous two sections. Little, however, is more unsettling in the life of an institution than the expression of rage by its members or constituents. Hence when these feelings are expressed, they create a variety of reactions in the leadership region. Well-trained leaders are instinctively mindful of the damage that can occur within and without when planned changes for which they have accepted responsibility are under attack. Several different leadership styles under these circumstances are possible. First the extremes. An answer chosen by some is to never fully take responsibility for change, but rather to consistently act in a "political" manner. For top institutional leaders this can mean strongly affirming planned change when it appears to be either necessary or popular, but taking steps to move the institution toward a new equilibrium point when substantial resistance appears. This answer may be the option of choice by default when top leaders do not fully understand the reasons for and/or shape of specific planned changes that have been developed within the institution by a sub-group of its members in the atmosphere of a "divided house."

It is indeed a proper role for political leadership in a democracy to move the body politic toward an acceptable equilibrium point in relation to all major questions. How does this work out inside of an institution that is undergoing planned change? One possibility is that those who support the change will be very busy doing the work of implementation, while those who perceive the change as loss will be feeling -- and expressing -- a lot of pain, much of it in the form of hostility and rage. As this continues over time, leaders who are sensitive primarily to political matters will take note that there seems to be only one very loud sector. (Those who are busy implementing change will be too preoccupied to spend time making noise, in addition to having less reason to do so.) Given then a sense of dis-equilibrium as a result of the planned change effort, created especially by those who are experiencing grief, political leadership will instinctively attempt to find a new equilibrium point. Soon little will be left of the planned change -- and expressions of the pain of loss will continue because the old will not have returned.

At the opposite extreme we find leaders who possess a thorough "understanding" of the reason for and shape of the planned changes, but lack personal sensitivity to the realities of loss that others might be experiencing. When encountering others who express their grief in the external form of hostility and rage, "understanding" leaders are aghast. Refusal to support the planned change is seen as insubordination and worse. Distancing oneself from those who express pain and working with those who support the change are seen as primary components of the answer. The assumption is incorrectly made that the pain, or those expressing pain, will simply go away or become otherwise unimportant over time. The price of not acknowledging feelings is very great.

Moving away from the extremes, what is called for in the successful implementation of planned change is a healthy combination of "political" and "understanding" leadership, with the inclusion of considerable personal sensitivity to the problem of loss. Without a thorough understanding of the planned change, a politically-sensitive leader will be at the mercy of those who make the loudest noise. Without personal sensitivity to the problem of loss, a leader who understands the planned change better than anyone else will succeed only in dividing the institution. With a combination of understanding the planned change, plus political and personal sensitivity, a leader can listen to the pain of loss that institutional change inevitably engenders, understand its source, and creatively use the tools of grief work to assist those feeling the pain to emotionally re-engage with the new realities. In a world where nothing is guaranteed, everyone will feel more secure.

Conclusion

Grief is a reality of any planned change effort. We are all creatures of habit, dependent at one level or another upon the security of known reference points. Institutional change shakes up both us and our regular patterns as described at the beginning of this paper. Insofar as one has invested oneself and one's life in the institutional priorities, goals and projects that are being de-valued or replaced, it is normal and natural to perceive specific elements of planned change as loss, and to grieve the loss in preparation for one's own engagement with the new.

With planned change we have to think things through afresh. This is, of course, one of the major benefits of the operation. But in the midst of the accrual of whatever positives, it is necessary to also acknowledge the negatives. The pain of loss is prolonged when it goes unacknowledged. In the words of John Bradshaw, "You can't heal what you can't feel."[11] And in the words of Kahlil Gibran, "The deeper that sorrow carves into your being, the more joy you can contain. Is not the cup that holds your wine the very cup that was burned in the potter's oven? And is not the lute that soothes your spirit, the very wood that was hollowed out with knives?"[12]

Endnotes

1. Bradshaw, John. *Homecoming.* (New York: Bantam, 1990), p. 65.

2. Gibran, Kahlil. *The Prophet.* (New York: Alfred A. Knopf 1966) [copyright 1923] p. 52.

3. Tillich, Paul. *Systematic Theology.* (Chicago: Univ. of Chicago Press, 1963), Vol. III, Part I.B.2.a., pp. 50-51 and following.

4. Portions of the discussion of grief and grief-work theory included in this paper were incorporated in three previous papers. The original paper was presented at the Association of Integrative Studies meeting at Arlington, Texas, in October of 1988 and was titled, "CORE For Anyone: On Coping Creatively with the Needs of a Faculty that is Undergoing Major Curriculum Changes." A second version of that paper titled "Professional Growth Through Curriculum Development: Coping with the Pain of Change" was presented to the Freshman Year Experience Conference at Cincinnati, Ohio, in November of 1989. Excerpts from this discussion were also included in the article by Davina Brown and Kenneth Christiansen, co-authors, "Coping With Loss: Emotional Acculturation in First Semester Freshmen", published in the Journal of the Freshman Year Experience, 1990, Vol. 2, No. 1.

5. See especially Fried, Marc, "Grieving for a Lost Home," found in Leonard Duhl, ed., *The Urban Condition* (New York: Basic Books, 1963), pp. 151-152. See also Marris, Peter, *Loss and Change* (New York: Random House, 1974).

6. Marris, p. 6.

7. Ibid., p. 8.

8. Ibid., p. 31.

9. Lindemann, Eric. "Symptomatology and Management of Acute Grief," American Journal of Psychiatry, Vol. 101, Sept., 1944, pp. 141-145.

10. In Transactional Analysis terminology, which Lindemann did not use, these correspond to the CHILD and ADULT areas of the personality, respectively.

11. Gibran, p. 29.

12. Bradshaw, p. 80.

RETHINKING THE FACULTY REWARD SYSTEM

John P. Fogarty
Robert L. Spuller

It may be that often a faculty and an administration talk and act at cross purposes, much to their mutual disadvantage. The faculty may be more concerned with addressing administrative policies and actions it perceives as detrimental to its interests than with formulating and communicating those interests in positive and practical terms. Consequently even a very conscientious and faculty-friendly administration may misappropriate its resources with respect to achieving the most satisfactory faculty reward system. This paper begins to identify and express what it is that faculty members want in a reward system and how administrators might address those wants in cost-effective ways.

Introduction

In 1986 our college was identified by the Council of Independent Colleges as one of 10 outstanding academic workplaces in the nation. A few years earlier we would have been near the bottom in terms of faculty morale and have almost certainly slipped down a few notches in recent years. Our being identified as outstanding, together with obvious fluctuations, has made some of us very thoughtful about the circumstances that can make college teaching more rewarding, or less so.

In early January of this year we conducted a survey of faculty valuations of about 20 intrinsic and extrinsic rewards potential in undergraduate college teaching. The list of items was based on personal experience and input from colleagues, and allowed additions.

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Robert L. Spuller, Vice President and Dean for Academic Affairs, Lenoir-Rhyne College, Hickory, NC

On the basis of responses from the eighty faculty members present at the "Faculty Assembly" meeting and our many years of concern for faculty development, we have developed a statement based on what our faculty most values and is most satisfied with and a response as to how the administration might act in light of those values.

There will be an initial presentation from the faculty perspective to be followed by a response from the administrative perspective, this to be followed by a 15-minute open discussion in which we hope you will all participate, making this the basis for thinking further about ways in which we might enhance the undergraduate teaching experience, reduce the tendency towards burnout, facilitate a greater sense of real achievement, and so forth.

A Faculty Perspective On The Faculty Reward System

Wholly undergraduate faculty members operate in a peculiar context. In most cases they have acquired the same professional skills and earned the same professional degrees as their graduate-faculty counterparts. In their careers, however, they are far less likely to receive the same professional recognition. Furthermore, they will be expected to keep abreast of a broader variety of academic subjects, to devote more attention to pedagogical matters, and, most likely, to carry a heavier teaching load. But they are far less likely to receive even equal remuneration.

Despite such disparities a great many academics choose to teach in a wholly undergraduate situation. And it would be foolish to imagine that none of them could qualify for appointment in a graduate situation. If we can determine why they have chosen their particular path, what it is that they like about it, we may be able to enhance their passage along it. In an attempt to make such a determination, we have done much reading, much thinking, and some formal research.

Only in the literal sense is this an academic matter. Our institution is engaged in a constant struggle to meet the faculty's needs and desires, personal as well as professional, while operating with rather limited financial resources. At our college the burden of the struggle rests most heavily on my co-author, Dean Spuller, but the burden of the outcome rests most heavily on my colleagues and me.

His involvement in the struggle is formal and necessary as well as personal. Mine is essentially personal. I have been director of our Faculty Development Seminars program; I originated and chaired our faculty's Educational and Professional Standards Committee; and, while eschewing any formal administrative role, I have maintained a self-appointed role as advisor to the administration on faculty development and faculty rewards.

During a recent spell of financial constraints, I was discussing with our president the possibility of providing less costly or entirely non-monetary rewards to faculty members if their salary aspirations could not be met. It was around the same time that I received this conference's call for papers, including the category: Rethinking the Faculty Reward System. The coincidence was effective.

In addition to brainstorming with a variety of faculty and administration persons and consulting a variety of printed sources, I took advantage of a friendly, cooperative body of colleagues and used a meeting of the Faculty Assembly to conduct a survey of faculty attitudes and values with regard to a number of factors which might be considered the potential rewards of undergraduate teaching. Under the circumstances I got a 100% response from those present, about 90% of the regular full-time faculty. The survey form which was used has been distributed here (is as shown).

One of the first things the survey revealed was that short of satiation in every respect, assuming such could ever be achieved in any respect, it would not be possible to please everyone. For some, time is of the essence; for others, the essence is money. For some it is the working environment; for others it is accomplishment. And so on. Furthermore, we can be quite certain that if someone's first priority were met, there would almost immediately be a previously secondary one to replace it as a foremost unmet need or desire. Still, if an administration could facilitate and/or support the realization of the primary needs and desires of its faculty, any shortcomings would probably serve to provide only a source for contented grumbling.

Three intrinsic rewards commanded the special regard of our faculty. A full 75% indicated that the opportunity to be active, teaching in an area of personal interest was a most important factor in their choice of vocation; and another 17% placed it as a second most important factor, making 92% for whom it was very important. In fact, 42.5% indicated it as the single most important consideration - far outpacing all other considerations. Nearly as important, receiving less first-level but a great many second-level identifications, was the faculty member's desire to have a sense of worthwhile profession - helping others and contributing to the improvement of society, with 56% identifying it as a most important consideration and 35% as second most important.

The third most highly valued consideration involved the faculty member's opportunity to be positively involved in the lives and development of their students. This factor is to some extent an effective corollary to the somewhat more cognitive one which preceded: i.e., the sense of worthwhile profession, helping others and contributing to the improvement of society. While the total of 85% who placed it first or second was a bit lower than the preceding two, 64% or nearly two-thirds of the faculty placed it as a primary consideration.

While "opportunities for personal and professional growth" and "association with potentially stimulating colleagues and involvement in potentially stimulating situations" received 70 to 75% identification as most or second-most important considerations, only a little over a third of the faculty identified them of first-rank importance.

There were not many additions to the choices provided and of those given, most actually were sub-categories of the ones provided. That, I think adds weight to the fact that 6 respondents wrote in "autonomy" (in one form or another) as an additional consideration of major significance.

What all of this suggests to me is that we faculty members, for the most part, just want to be left alone to do what we want to do, that while there is certainly a selfish dimension to such an attitude, we sincerely believe that what we are doing has significant potential for the good of others and that within our subject area we know better than others how to achieve that good. Furthermore, possibly without as much justification as we professors would like to believe, we feel that our personal stimulation and professional development are not as important as the stimulation and development we provide for others. To some extent this may be justified by the relatively low level of academic challenge placed on us by undergraduate students. It is not always justified in terms of our pedagogical effectiveness.

Faculty impressions as to our administration's effectiveness in supporting and facilitating the realization of our intrinsic values were interesting in that on four of the five items there was a roughly equal distribution with from 20 to 31% indicating that they felt the administration was providing the most effective support in any one of the given areas. The one area in which only 6% felt there was significant administrative support was in the area of association with potentially stimulating colleagues. And 24% indicated that area as the one in which they received the least support.

In conjunction with the preceding I would note that while 24% saw the administration as providing major support with respect to opportunities for personal and professional growth, nearly half, 47%, saw this as the administration's weakest area. I believe that these must reflect, at least in part, a monetary perspective - that is, a feeling that the administration should provide more support for travel and related costs for participation in workshops and professional meetings. If so, it represents the faculty's misconception of the meaning of the item. It was intended to be closely related to the first item: the opportunity to be active in an area of personal interest. They may have seen it in the sense of number five under extrinsic rewards: extracurricular opportunities for personal and professional growth with time and resources for such.

There were no other areas of "least support" which were identified by a large number of respondents.

Turning to the realm of extrinsic rewards, surprisingly, the matter of salary did not rank as being as important as having a flexible schedule or a pleasant and respectable working environment. I say surprising, because there has been much faculty concern expressed regarding salary during the last few years and that concern was near a peak at the time our survey was conducted. Furthermore, nearly one-half, 48.5%, of the respondents indicated that they felt that the administration was providing the least support with regard to salaries.

Other than the matter of salaries there were no areas in which a significant number felt that the administration was doing either an especially good or an especially poor job. There were 26% who felt that the administration was making a major effort in the area of providing extra-curricular opportunities for personal and professional growth. All other categories received about 15% or less.

I find the somewhat positive response in the area of extra-curricular opportunities for personal and professional growth strange since 47% had been critical of the administration's performance in the similar area of intrinsic rewards, but there is sufficient room in the numbers for the positive 26% to be an entirely different constituency than the negative 47%.

I will not attempt here to enumerate the constraints within which the administration must try to satisfy the faculty's needs and desires and how they can deal with those constraints. That is Dean Spuller's task. I will try to summarize what the foremost of those needs and desires seem to be.

A starving person is not likely to appreciate the fine clothing you offer in place of food. Thus, it seems reasonable to assume that the extrinsic reward of salary must be considered in distinction from the faculty's emphasis on the intrinsic rewards of greater control over their schedules, course contents, and methodology. If the level of faculty remuneration is significantly below faculty expectations, we can expect either an exodus of the most competent members or a discontent which will affect performance and the institutional image.

Some minimally satisfactory salary presumed, it would seem that the administration should have enough confidence in the competence and professional ethics of the faculty to let at least the tenured faculty operate with as little supervision and accountability as is absolutely necessary. Secondly, it should do everything in its power to make the faculty members feel professional, feel important, feel that their day-after-day efforts are actually accomplishing something. This should not be done with vain and general platitudes, but with specific recognition of specific achievements. That includes encouraging students and the parents of students to express to the administration any thanks or praise they may have for their professors. Faculty evaluation is almost always regarded as being more critical than supportive.

In conjunction with making the faculty members feel professional and important is the matter of providing the pleasant and respectable working environment that so many said was important. This includes such things as providing the same level of secretarial support that administrators command for themselves, providing offices which have as much dignity as those administrators provide for themselves. Providing and equipping classrooms which present the professors in a complimentary light, and providing a convenient time and place together with incentives for faculty members to gather informally but professionally.

Finally, for the satisfaction of the faculty and the direct benefit of the institution, the administration should provide support for professional development within the institutional context and beyond, in the form of supporting memberships and participation in professional organizations and related conferences and workshops.

A balanced presentation would also include a great deal about the obligations incumbent upon a faculty which might expect such support from its administration. But though I have many opinions on that matter too, this presentation deals only with the faculty reward system, and so I will now let Dean Spuller address that matter from the administrative perspective.

An Administrative Perspective On The Faculty Reward System

To all who understand higher education, and particularly to the college administration, it is obvious that the most important institutional asset is the faculty. Students are important to be sure because without them we would have no reason to be in business, and without their tuition revenue we could not afford to stay in business. Adequate facilities and equipment are important also because they provide the places and the tools necessary for the teaching/learning process to occur. The administration is even important because it is charged with keeping the institution moving forward and with managing its resources, both human and financial.

But, the faculty represent the heart of the place. The character of a college depends on the vigor and resourcefulness of its faculty. A quality educational product can not be delivered without a high-caliber, committed, vital faculty. As the survey which Professor Fogarty administered shows, faculty are people who enjoy what they do and for whom even small rewards are important and gratifying. They are not out for the money necessarily; they take great satisfaction from the students they teach and mentor and in seeing them grow and develop; they value the opportunity to engage in scholarship; and they desire a great deal of autonomy. We have to be sensitive to the faculty's need to be recognized for what they do. That recognition is important for them to know that what they do makes a difference and for them to feel appreciated and have a sense of worth. They have a pride in and dedication to what they do. They feel a certain dignity should attend their profession. They want an evaluation system which is built on rewarding the positive things they do rather than penalizing them for those things they might not do as well.

From an administrator's point of view, keeping the faculty alive (both figuratively and literally; physically and professionally), productive, and happy should be the number one goal. Devising and administering a reward system which will allow the achievement of that goal is the number one challenge. It is important that administrators realize that on the one hand faculty want and deserve to have involvement in the governance of the institution and in defining their role within it. This may be even more true in the context of the small college such as we represent. They want to have a part in making the institution what it is and what it needs to be or can be. They want to help shape it. Yet, they want to work in an environment that is free from excessive bureaucratic regulation and restrictions. We administrators have to realize that faculty can become demoralized when they feel their needs are not being met, that their interests are not being considered, or that their efforts are not being recognized and appreciated.

I think the results of the survey conducted on our campus are interesting. In most respects they are not surprising to me. I can understand the desire for autonomy, for more opportunities for personal and professional growth, and a desire for more support services. Over the years we have responded to many of our faculty requests and suggestions. The need is great on our campus, and on every campus for that matter, for a faculty reward system which provides incentives to enhance the performance and morale of the very diverse group of talented individuals which make up our faculty.

I think that on many campuses, and ours is probably quite typical, there is a tendency, as the administration seeks to respond to faculty needs and interests, to develop a reward system in an ad hoc or piecemeal fashion. Or, to simply implement a reward system which works at another institution without regard to the distinctiveness of their own particular college. The danger here is a reward system that is fragmented, narrow, possibly inefficient and inequitable, and which fails to address the institutional mission and goals. Educational resources, economic, physical and human are too precious to waste in this fashion.

To be effective and meaningful, the reward system can not be developed in isolation of the planning process of the institution. To ensure its place in the institutional plan with the priority it deserves, a number of key questions need to be considered in its development.

1. What is the primary educational mission of the College?
2. Where does the institution want to be in 5-15 years? (important to know as we shape the faculty today to help us get there)
3. What type incentives would best support our institutional goals?
4. What are the strengths, weaknesses, and particular needs of our faculty?
5. What type incentives will have the greatest and longest-lasting impact upon our faculty?

What is the ideal faculty reward system? For each college it is one which is designed to respond to the distinctive mission of that college. It is carefully tailored to local circumstances and to the particular needs and developmental differences of the faculty (i.e. where they are in their careers and what their greatest needs and interests are at particular stages in that career). It encourages and rewards faculty initiatives rather than restricting them. It provides the incentives which are most attractive to faculty members and which will most economically and effectively stimulate their best work. It is one in which the incentives are applied in a consistent and equitable manner. It rewards and recognizes outstanding work while, at the same time, providing encouragement and opportunity for faculty (both younger and more mature faculty) who need to engage in meaningful experiences which will make them better teachers and scholars.

Effective reward systems require support from the top -- the President and the Dean. It is the role of the Dean to champion such programs, to fight for them and their funding, and to administer them. However, no reward system should be imposed from the top down. Rather, the system should be the result of a cooperative effort between the Dean and the faculty it will affect. I have faculty, like Professor Fogarty, who are strong advocates of sound professional development programs and who constantly keep me apprised of the things we need to do which will make them and their colleagues better at what they do and better able to do what they do.

We have a Faculty Development Committee which has among its primary responsibilities the task of initiating recommendations and proposals to maintain and enhance the quality of the development program. Working with this committee we have, I believe, put together a faculty reward which addresses many of the things deemed important by our faculty.

It is obvious that we can not afford to provide all the services and resources that faculty request if given carte blanche. We have struggled to try to provide for our faculty many incentives which might be considered "big ticket" incentives: competitive salaries; expanded fringe benefit packages; and adequate facilities and materials (classrooms, laboratories, library resources, etc.). However, and as might be expected, we have been most successful in providing those rewards which are less money-intensive and which represent longer-term institutional investments.

I would like to articulate the elements of the faculty reward system at our institution. I need quickly to point out that I realize ours is not perfect nor complete. We need to do more. In addition to these things and in the absence of unlimited dollars, we are attempting to be more creative. As an example, we are exploring the possibility of developing an in-house category or "rank" beyond full professor which might be called "Distinguished Teaching Professor" to which some of our very best teachers might be promoted.

a. Professional Development Leaves - monies the equivalent of 2.5 average faculty salaries are made available annually to support semester, academic year, and full year half-time leaves. Over the past several years between 3-8 faculty have received development leaves each year.

b. Summer Development Grants and Other Grants - $12,000 is available annually to provide several grants of up to $3,000 each for faculty to use over the summer for professional study, research, writing, course-related travel, etc. In addition, we make available a number of Venture Grants (usually up to $500 each) for faculty, to be used in new course design, special projects and for other developmental activities. Limited monies are also provided to assist those who publish a significant piece with page costs, typing and reproduction costs, etc.

c. Travel Funds to Attend Professional Meetings - Approximately $30,000 is set aside annually to provide transportation, lodging, and registration fee money for faculty to attend professional/scholarly meetings. Recognizing that at an undergraduate, liberal arts institution such as ours, where research and publishing are done in addition to the primary emphasis upon quality teaching, we have "rewarded" faculty who present papers at professional meetings by providing full travel/meeting related expense support.

d. Released Time for Significant Research and Money for Professional Dues - These two new programs scheduled to start this next year will be delayed due to recent financial constraints. When implemented, however, the first will allow a certain number of faculty release time from teaching one course per year to engage in research activities. In the second, the College will provide up to $50/annually for faculty to help offset expenses associated with dues for professional organizations.

e. Faculty Colloquium - This program is low cost (wine and cheese) and provides intellectual stimulation for the faculty through a monthly forum in which faculty present to colleagues work in which they are engaged or interested and/or discuss the relationship of their discipline to the liberal arts.

f. Faculty/Staff Retreat - Held in the spring of the year following commencement, this retreat provides a time for fellowship, relaxation, study, and discussion for faculty and staff. Each retreat has a theme to which presentations (by persons from our campus and from off-campus) and subsequent discussions are directed.

g. Faculty Lounge - At the urging of the Faculty Development Committee to meet the goal of developing a greater sense of collegiality, space was provided in the Student Center for a faculty lounge where faculty can congregate (some days coffee and sweets are provided) to engage in informal discussion and fellowship.

h. Computers; Individual Offices; Private Telephones; Secretarial Support, etc. - These more long-term institutional investments and efforts provide the equipment and support necessary to make the work environment more pleasant and to facilitate the productivity of faculty. Approximately 60-70% of the faculty now have individual college-provided microcomputer equipment available for their use as well as access to the academic mainframe computer.

i. Faculty Recognition - This year we have initiated a new publication, *The Faculty Scholar*, which recognizes professional activities of our faculty (meetings attended, papers presented and/or published, books written, artistic works produced, etc.).

Ours is not a perfect reward system. However, I would argue that we make available a significant program in light of our available financial resources. More progress needs to be made. Some unexpected financial constraints of this next year will slow our progress. However, the administration remains sensitive to the need for and committed to the goal of providing a comprehensive incentives program for our faculty which will increase their vitality and subsequently will strengthen our institution. The future is now as far as providing the best teaching/learning environment possible. Such an environment is worth the investment of time, energy, and resources in making our faculty the necessary leaven.

COLLABORATIVE COMMUNITIES

Gloria Nemerowicz
Eugene Rosi

We discuss the need to consider a new concept of campus community in order to meet interdisciplinary learning objectives. If we are to produce graduates who can move beyond personal interests and narrow disciplinary boundaries to conceptualize a common good, we must let the community into our educational processes. We discuss two traditional models of campus community, and present an alternative, the collaborative community. Such a community incorporates collaborative problem finding and solving and provides structural linkages among people and ideas to form the basis for community. We will discuss the challenges to traditional academic life posed by such collaborative communities and provide examples of initiatives which embody the new concept.

As higher education is called on to produce the leadership necessary to solve the complex problems of pluralism and interdependency in the 21st century, what to teach and how to teach are issues of national and local debate. Whether the argument centers on the content of the curriculum -- general education, the common core, great works, diversity -- or on pedagogy -- integrated and interdisciplinary learning, experiential opportunities, discipline integrity -- voices from many points of origin are addressing the need to "build community" on campus in order to meet particular learning objectives. But what is the nature of the communities we are to build?

The resurgence of a "search for community" that dominates much popular and academic discourse today is driven by familiar concerns for the survival of

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democracy and the well-being of individuals. Community, real or perceived, has been related to group cohesion and productivity, social stability and individual mental health. Concern for the demise of community by those who value humane institutions and satisfying social relationships is understandable.

In a mass society where one can be ignorant of the needs and resources of one's neighbor, there is little sense of manifest common interest. In a traditional community, a consciousness of the similarity of other people influences behavior and ideally leads to a conceptualization of a common good. Even strong local or subcultural affiliations give little comfort to those who recognize the need for a broader identification which can inspire a more encompassing sense of the common good.

An increasingly pluralistic world compels us to move beyond a goal of reestablishing traditional communities to a concern for balancing the integrity of pluralistic communities within an inclusive framework. What values and purposes relate the farmer in Iowa and the African American in Newark? What frame of reference inhibits a nation from depleting a natural resource or risking war to enhance its national economy? At the heart of the ability to form encompassing communities is a consciousness of commonality that extends beyond geographic boundaries and is supported by a value for diversity.

Below we sketch three models of college community and argue for a modification of the traditional definitions of community to allow institutions of higher education to be among the first to model "collaborative community."

The Concentric Model

The Carnegie Foundation has recognized the need for a "more integrative vision of community in higher education," and proposes to explore "the kind of community every college and university should strive to be." The 1990 report, Campus Life: In Search of Community, goes on to define six principles that if followed will unify the campus and provide common purpose. According to the Campus Life report, if our institutions could be educationally purposeful, open, just, disciplined, caring and celebrative, we would establish a "spirit of community."

The hope expressed in the report is that once established on campus, this sense of community will spread to other sectors and institutions and will ultimately provide a source of renewal for the nation. This concept of reform is based on a Concentric model which holds the college community at its center, radiating influence, information and example outward. The model is consistent with the widely acknowledged responsibility of institutions of higher education to provide resources to surrounding communities. In this spirit, the college fulfills part of its commitment to public service by providing programming to inform or entertain the surrounding community. The "service" is generally one-way, from the college to the public. The Concentric model is limited and elitist; for many colleges it is also unrealistic.

The model fits best with the characteristics of a small, residential college, a relatively isolated enclave composed of a full-time resident population of students and faculty. Such colleges provide conditions which resemble those described with nostalgia by social commentators of the early 20th century as they lamented the loss of community in the face of mass society -- shared sentiment among participants, continuous face-to-face interactions, and a relatively stable population. The Concentric model is likely to produce a sense of community largely limited to the internal population of the college. There is a clear sense of "we" and consequently of "they" - sometimes politely referred to as "town and gown" - and the boundaries of the college are clear both physically and demographically. In most cases these institutions also have a tradition and the resources to support self-sufficiency, value consensus and a clear mission.

Unfortunately, the Concentric model, which may exist more in memories than in reality, appears to many to hold the most promise for the development and sustenance of community on college campuses. "Residential life provides an excellent setting for consciously learning about community and how it can operate, . . ."(Morse 1989). Even at institutions whose purpose, location, and population are quite distinct from a small residential college, this model has become an ideal to be emulated.

Using the residential liberal arts college as the model for community building leads to a misplaced conclusion as to the cause of the lack of community on the majority of campuses today. Typically the students and the faculty are blamed. Students are characterized as somehow deficient because they don't stay around on weekends, don't exhibit school spirit and loyalty, don't attend college-sponsored events in great numbers, work 20 hours or more per week, and live off campus with people who are not connected with the college. They are defined as less serious and less committed to their educational pursuits than are their counterparts at residential institutions. Likewise a faculty that lives off campus, has family and social obligations away from campus, is part of dual career marriages, and leaves campus offices vacant for up to four months a year, may have its loyalty and sense of community questioned. Rather than capitalizing on the diversity and the cross-cutting community affiliations these complex lives offer, too often we bemoan the "lack of campus community" and long for opportunities to gather around the fireside and discuss issues of common concern.

Particular Partnership Model

Many larger, comprehensive institutions move beyond the one-way flow of services of the Concentric model to connect in partnerships with specific sectors of the larger community. The reciprocity between universities and powerful interest groups - the government, the military, and corporate employers of graduates - has a well-established, if sometimes mistrusted, history. These groups have communicated their needs and supported academic enterprises with dollars, and higher education has responded with programs, technologies and research of mutual interest. Ralph Nader is one of the most recent authors to warn us of the potential dangers to academic freedom of the "corporatization" of universities in partnership with businesses (Mercer, 1990). Similarly, concerns are periodically raised, often from within the university, about the ethics of government (military) contracted research emanating from institutions of higher education.

Though the Particular Partnerships model subjects the campus to influences from outside the academy, these relationships are largely functional, involve subunits of the university, and do little to build community. The government, the military, and industry exist largely as economic partners. No sense of a common good beyond institutional survival and individual research interests is pursued.

Both the Concentric and Particular Partnership models are unacceptable for building the kind of campus community that is needed. With the Concentric model, a sense of community exists but membership is limited to campus residents and the external community is often alienated. Colleges and universities with Particular Partnerships are often fragmented and competitive internally and have little sense of unifying common purpose.

Collaborative Community Model

Consideration of a new configuration of relationships with a broader representation of community interests is needed if we are to develop collaborative communities that can serve a common good. A connection with the community - from the neighborhood to the globe - is integral to an education which will produce socially responsible leaders and problem solvers for the 21st century. If we are to produce graduates who can move beyond personal interests to conceptualize a common good, we must let the community into our educational processes to provide an environment that reflects greater interdependency between the academy and the rest of the world. To accomplish this, it is not sufficient to think in terms of "speaking to" those outside the academic boundaries; we must rather speak with and listen to voices that have historically been defined as outside.

The reality of the lives of the members of our institutions and the objectives of an education for social responsibility argue for a new conceptualization of campus community that goes beyond the Concentric or the Particular Partnership models. A new model which incorporates collaborative problem finding and problem solving linkages with people and interests beyond the academy is emerging to provide the basis for community within the academy. These learning and working communities will support attempts to educate for broad based, intermittent leadership and social responsibility. They will also challenge assumptions about the academic enterprise.

Traditional definitions of academic purpose, however lofty in the abstract, often pivot around the pursuit of individual interest - getting grades, tenure, a degree, a paycheck; publishing, networking, socializing. A focus on these instrumental goals diminishes the importance of the substance of the interactions that bind us in common purpose - faculty to student, faculty to faculty, student to student, campus to community. We rarely ask ourselves what we are doing, or who we are. We rarely have occasion to reflect on the substance and meaning of the processes we are engaged in - learning, educating, problem solving, playing, working. It is those processes that reflect the "relatedness" described by Parker Palmer as being at the heart of community in classes, committees, meetings, partnerships, programs. These vehicles must provide the occasion to make conscious our responsibility to one another and to a larger common good.

To the extent that the college broadens its self-definition to include interdependency and social responsibility, we increase the likelihood that we will produce engineers, teachers, managers, etc. who will not simply identify themselves as narrow professionals, but will consider acting on behalf of a common good as part of their professional and public responsibility. Since in many comprehensive institutions a significant portion of our student body is already in the labor force, the potential for impact is immediate.

The same definition of community encourages our college workers - faculty, administrators and staff - to consider the work they do in the context of contributing to common good outcomes. In the classroom both faculty and students are responsibilities. Classroom experiences that promote interaction, employ strategies for cooperative learning, and push the boundaries of a dynamic classroom into the community suggest the opportunities for going beyond narrow definitions of teacher and student.

Maximizing human development and the potential for identifying and solving problems requires similar conditions in the classroom, on the campus, or in the community. They include building trust, minimizing inequality of status, encouraging diversity, promoting "grounded knowing" (Oliver, 1990) and "creative conflict" (Palmer, 1987). In all three arenas these conditions can be better achieved to the extent that the essential definition of the campus community includes the integration of people from beyond the official campus structure. In the ideal, we will go beyond conversations with individual, neighboring constituencies and interest groups to discussions and actions that represent the interests of more remote concerns - from disenfranchised populations to ecological welfare.

Collaborative Community As a Challenge to the Academy

The challenges posed by integrating community and emphasizing the common good are serious and require discussion.

1. Locking campus community into broader community networks is a potential challenge to the autonomy and authority of the academy. Engaging the community in the definition of mission, curriculum and co-curriculum may be perceived as an assault on professional accrediting bodies and institutional self definition.

2. The promotion of the vision of an education for non-elitist leadership and social responsibility may be perceived as "politicized" and a challenge to "value-free," objective education. The vision of community and definition of educational philosophy upon which the vision rests is clearly rooted in democratic, humanistic values.

3. Attempts to increase relatedness in the curriculum may be a challenge to discrete discipline approaches to understanding. As we increase interdisciplinary approaches, traditional majors may be less attractive to undergraduate students.

4. The actualization of the ethos of service to the community should result in including rewards for such service into the reward structure for both faculty and

students (Mercer, 1990). Service to the community may compete with teaching and research as an important dimension of faculty and student development.

5. Interactive, experientially based pedagogy played out in democratic classrooms challenges the lecture format, the professor as wisdom dispenser, and the passive student as information regurgitator. Collaborative learning challenges competition as the most effective motivator for learning and tests individualism against the power of teams to promote creativity and growth.

Examples of Collaborative Community Building
Monmouth College

While preparing our students to analyze complex, interdependent systems and to develop collaborative skills, we have necessarily moved Monmouth College into partnership with the surrounding community. The following illustrate some of the initiatives we have taken to open the boundaries of our institutional definition and speak more meaningfully with the communities around us. (These initiatives are supported by a $1.8 million grant from the New Jersey State Department of Higher Education.)

- We have established several Community Based Courses which link classroom and experiential learning and serve community needs. In these three credit courses, students spend approximately four hours a week in public service placements in the community and two hours a week in classroom discussions of the academic relevance of the experience. For example, a student might spend the semester reading to a child in an inner city school and studying the sociology of education or the politics of school financing in the classroom. A history course might have students interviewing old people in a nursing home to reconstruct the past with them. Women's Studies faculty have structured a course around volunteer work in a women's shelter. These courses are a challenge to the traditional definition of experiential learning as an individualistic experience, appropriate primarily for its career application. Rather, faculty have used community definitions of problems to guide the choice of settings they can use to illustrate and promote learning.

- An Institute for the Study of Democratic Leadership offers opportunities for community people, faculty, administrators and students to work collaboratively on issues of common concern. The Institute's approach to public issues analysis and decision making emphasizes collaborative problem solving, systems thinking, and the broad perspective of interdisciplinary study. Under the auspices of the Institute, Monmouth faculty, students and community members have established several seminars focusing on issues relevant to democratic leadership and social responsibility. Topics include Technology and Society; Creativity and the Organization of Work; The Environment and Responsible Leadership; Women and Leadership; Pluralism and the Common Good; and Public Issues of Aging. Each seminar will produce materials to be used in the classroom and in the community (e.g., in service-training) to continue to promote discussion and have some impact on policy.

Community participants contribute the perspectives of a broad constituency - workers at all organizational levels, artists, the government, children, activists, public service agencies - and influence both the choice of seminar topic and the teaching materials that are produced for the College and the community. For example, the seminar on the Environment has produced a simulation on solid waste disposal developed by an environmental lawyer and a Monmouth student. The Creativity seminar is bringing together public school teachers, artists and managers to discuss constraints on creativity. In the Technology seminar a Monmouth professor and public school teacher are developing a module on technology and values for high school students.

- Responses to the drop-out problem in public schools. Community representatives, public school teachers, guidance counselors, and workers from local businesses in collaboration with College faculty and students have developed a variety of programs to enhance the educational success of pre-college minority students. College students can derive academic credit for participation as tutors, planners, observers. The programs include a pre-college PATH (Program for Advancement Through High School) to college for 8-12 graders including an after-school collaborative problem solving workshop, a two-week on-campus summer residency, year-round tutoring support, Saturday morning on-campus meetings, and a Parent's Support Group. PATH emphasizes team work, conflict resolution, self esteem and readiness for leadership and group participation. The PATH joins businesses, public schools and the college in an effort to increase minority graduation rates from high school and entry into college.

Programming for collaborative community can be used as a basis for courses, faculty development, and co-curriculum experiences. As colleges and universities become open to the possibilities of building collaborative communities, interweaving college and community concerns, responding to people and problems holistically, and linking the classroom with the surrounding world, we will create the conditions and enhance the prospects for internal cohesion as well.

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BOUNDARY SPANNERS: LEARNING COMMUNITIES FOR ADULTS

Paula E. Peinovich

Fostering community among adult learners, whether in a campus based or distance learning environment, is difficult for higher education institutions. These learners are an unruly lot, with families and jobs and civic responsibilities and a list of priorities which always centers on something beyond the boundaries of the institutions. None-the-less, adult learners are very much in community as they progress toward their educational goals, finding both curricular and co-curricular resources and support in all parts of their lives. Their community spans the boundaries of classrooms and libraries, of family dining room tables with homework spread out and workplace lunchrooms with spontaneous support groups, of television, computer and tape deck. Their community is fluid, portable, and often unorthodox in traditional higher education terms. What is the institution's role in fostering such community?

Continuing educators who are in step with the future are creating the fourth generation of American higher education every day. The first generation was that of the aristocracy whose purpose was to groom and educate the sons of the wealthy for genteel lives as clergy and landed gentry; the second generation was that of the meritocracy whose purpose was to educate the intellectually talented for professional lives; the third was the democracy whose purpose was to educate a cross-section of young people for productive lives as citizens and workers. These three generations share two common features: they focused on the young people of the society and were institution centered.

The fourth generation belongs to the lifelong learners; their purpose is to pursue continuous education throughout their lives in order to become enriched private citizens, responsible members of our public corporation, and articulate contributors to the global economy.

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Recent reports from the College Board indicate that the overall number of participants in the fourth generation of higher education continues to grow, despite economic conditions and depressed enrollments in some sectors. As this growth persists throughout the 1990's, they predict that participation patterns of all students of all ages will merge into two categories: part-time students and full-time students, with the part timers in the distinct majority.

Because of economic and family circumstances, many traditional aged students are adopting part-time attendance patterns typical of adults, and more adult students are adopting full-time patterns typical of young people. In the fourth generation, there are fewer distinctions between and among the learning needs of people of different age groups, and fewer categorical descriptions of students which are meaningful.

Fourth generation college students, unburdened of stereotypes from the previous generations, pursue higher education periodically and episodically, selecting services and programs which meet their continuously changing needs. Their educational outcomes no longer depend upon what an institution makes available, but on their own goals and needs. Thus, the fourth generation of higher education looks beyond age and centers on the learner rather than the institution.

Institutions still looking at themselves as the center of the higher educational universe, the center of their students' learning communities, will find themselves increasingly out of step with the future. Institutions who shift the focus of their learning communities from campus to their students' lives will be in step.

The exact nature of a fourth generation learning community is still relatively amorphous. If such a community finds its center in the learner instead of the institution, and combines resources and support from many different parts of the learner's life including but not limited to the institution, what should an institution appropriately provide to maintain the integrity and quality of its program and yet remain learner centered?

Regents College, an assessment institution which offers degrees exclusively at a distance, is increasingly puzzled over this question. Founded on the principle that what an individual knows is more important than where the knowledge was acquired, the College never adopted the now quaint concept of **in loco parentis** typical of the first three generations of higher education institutions. If the college is not parent, but colleague to the student, what should it provide? If students find learning and support for learning at work, in the community, in the home, in independent study, what role does the college play? What role should it play to maximize the learning and increase its efficiency?

To answer questions like these the College has undertaken a research project with its students to have them identify the nature and scope of their own learning communities. The research project is in progress, in a qualitative phase with in-depth interviews with a small sample of students in various programs. This phase will be followed in the summer by a quantitative phase, drawing in a large scale sample of Regents College students to define the categories of a learning community which is not institution centered.

I propose to present to the 10th Annual Conference on Nontraditional/Interdisciplinary Programs the findings of the qualitative phase of the study and to present the instruments to be used during the quantitative phase. Further, participants who are interested in conducting the quantitative study at their own institution, based on the qualitative work completed at Regents College, will be welcomed to join the study with the intention of yielding better information about learning communities through a larger, more diverse sample.

Such a research collaboration, growing out of the 1992 conference, presents potential for follow-up at the 1993 conference, with findings and recommendations from the institutions involved. This presentation, then, is really a call to fourth generation continuing educators interested in finding ways to support their students' learning communities.

THE MARIST COLLEGE CLUSTER PROGRAM: A COLLABORATIVE, MULTI-DISCIPLINARY TEACHING PROJECT

Vincent L. Toscano

The Core curriculum at many colleges and universities is a "bundle of compromises" that makes our Constitution pale by comparison. Given so many competing pressures it seems impossible to develop a program with an interdisciplinary flavor and an intellectual coherence. The cluster project was an effort to do just that at Marist College. Three years experience suggests how far we've come, and how far we need to go.

For several reasons, a discussion of the Marist cluster project should begin with a brief review of the history of the faculty's efforts, over the last fifteen years, to construct a curriculum appropriate to a Liberal Arts experience for undergraduate students. In the first place, Marist College has undergone a series of transformations which, judging by the themes in higher education literature, seem rather typical of the experiences at many other colleges and universities. In addition, the nature and focus of the faculty debate was shaped by a variety of issues that appear to be central to discussions which continue to engage the attention of faculty, administrators and researchers throughout higher education.

During the late 1970's the Marist faculty began to face up to evidence that the "reform" of the curriculum which had been shaped by the assumptions and rhetoric of the late sixties was a failure. In that earlier initiative the existing and extensive (56 credit) Core curriculum was abandoned and students were allowed to choose all of their electives. For students in some majors that amounted to nearly 90 of the 120 credits required for graduation. The idea behind those changes was that the curriculum would offer our students an intellectual smorgasbord, and they would choose from among the offerings in accordance with their individual interests and talents. After an analysis of course selection patterns over a period of five years we discovered that (continuing the metaphor) the students were heavily engaged in sampling the appetizers and desserts and were avoiding their vegetables and protein.

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In response to those findings the academic leadership began to develop an outline for curricular reform. Student choice would be curtailed in favor of institutional requirements. More importantly, a new Core curriculum would form the basis for a Liberal Arts experience which all Marist students would have in common. Getting faculty support for those principles proved easy. However, developing faculty consensus on the elements of the new Core or on the meaning of a "Liberal Arts" experience - which courses would be required?, would we have simply distributive requirements for breadth or an integrating intellectual framework for coherence?, if an integrative model, whose model would it be? - proved a much more elusive goal.

In the end a consensus sufficient to pass a new curricular structure was achieved in time-honored fashion by giving a piece of the action to those disciplines which saw advantages in participation, and reassuring those faculty with reservations that the curriculum would continue to evolve over the next few years - most likely in the directions they favored.

These discussions and developments were taking place during a period of time in which the essential character of the institution was undergoing significant change. In the early seventies Marist was a fairly traditional undergraduate Liberal Arts College with 1500 students, of whom 60% majored in History, Literature or Language and went on to careers in the professions (teaching, law, social service work). During the next dozen years the student body doubled and the faculty nearly so. These enrollments were, to a great extent, attributable to the new undergraduate programs which had been added in a variety of "careerist" areas such as Accounting, Communications, Medical Technology and Criminal Justice. In addition, graduate programs were introduced in Business, Computer Science, Public Administration and Psychology. By the mid-eighties nearly 80% of Marist students majored in either Accounting, Management Studies, Communications or Computer Science and 10% were in the Social and Behavioral sciences. Humanities majors made up little more than 5% of the student body, while enrollments in traditional humanities courses were primarily the result of the requirements of the Core curriculum.

Naturally, as a consequence of these developments, there were corresponding changes in the composition of the faculty. While many of the newer faculty were supportive of the desire to retain a Liberal Arts emphasis at Marist, few taught any Core courses. Most were stretched to their limits trying to cope with the demands of heavy enrollments while also engaging in needed curricular and program development. Given those pressures there was a natural tendency to look upon the Core as someone else's responsibility, a program that was nice to have so long as it didn't interfere with the development of the major.

Meanwhile, among the faculty who were most heavily engaged in the Core Program (Philosophy, History, English, Religious Studies, Modern Languages, Mathematics and Natural Sciences) there was growing dissension regarding the direction being taken in the development of an intellectual model that was supposed to provide the integrative underpinning for the Core. There were interminable discussions occasioned by charges of "shoehorning" and threats to "academic freedom." After more than five years of intensive debate an increasing number of the faculty grew weary of the battles and came to despair of ever achieving an intellectually coherent program with so many different disciplines and personalities vying for attention and leadership. By the late eighties the Marist Core had taken on an almost exclusively distributive character; students took 10-12 courses of which only 3 were required of all, with no discernible linkages among or between any of the courses in the program. To some it now seems reminiscent of the "smorgasbord" of earlier years, only the service has changed.

In addition to changes in the size and nature of the institution and of the composition of its faculty, as well as the internecine quarrels surrounding the Core program, there was another force shaping the institution during this period; namely, the demographic realities of a dramatically shrinking pool of high school graduates. Among the many issues demanding attention in light of those numbers, few were as widely discussed as the need to improve student retention. Retention was seen as especially critical to tuition-dependent institutions such as Marist in a climate of increasingly sharp competition for each new freshmen class. Concern with retention was coupled with the arrival of more and more students who - often with their faculty advisor - were impatient with courses (i.e., Core/Liberal Arts) which they perceived as non-essential to their career plans.

The national focus on retention also called increasing attention to the level of abilities of incoming students and provoked lively debates on many campuses. The standardized examination scores of the college freshmen of the eighties suggested that their ability levels were fairly comparable to those students from earlier decades. Yet many veteran teachers came to rather different conclusions regarding the intellectual abilities of the students in their classes. Nowhere was this latter sense more passionately held than among the traditional liberal arts faculties who often regaled one another with stories of how little their students knew of history or literature or geography or current events, how deficient they were in the intellectual discipline demanded in the sciences and mathematics, how unresponsive they seemed to dialogues intended to provoke analysis or reflection.

In the judgment of many faculty this confluence of factors did not bode well for the vitality of the Liberal Arts experience at Marist. Perhaps what was most discouraging was the sense that the Arts and Sciences faculty had failed to present to the students, or their colleagues in other areas of the College, or to the public at large, a persuasive articulation of the values of humanistic studies and the liberal arts experience. Without such a rationale how could Marist (or any other institution) hope to preserve a program that accounted for more than 25% of the students credits and consumed institutional resources that might otherwise go to the major programs with high enrollments.

These were among the most obvious factors shaping the climate in which the cluster program was launched, although in retrospect, launched seems too grand a term. In the Spring of 1989 several colleagues got together one afternoon to discuss ways in which we might respond to our shared concerns about the students, the curriculum and the future character of the College. That first discussion was quite animated; one idea sparked others and several pages of notes were needed to capture the gush of suggestions and possibilities.

After several follow-up gatherings the outline of the initial cluster pilot project was completed. Since we all taught courses that would typically be taken by freshmen students we proposed a 16 credit program for the Fall semester. In addition to one course from each of the disciplines we represented - Philosophy, History, Writing, Art and Literature - a course in Library Research methods was included. We agreed to define the project in terms of three major goals:

1. To overcome the fragmentation inherent in a potpourri of required general education freshmen courses by developing the student's ability to synthesize knowledge and to encourage interdisciplinary thinking.

2. To encourage greater student/faculty interactions outside of the classroom in order to promote the "bonding" which seems to be associated with persistence and academic success.

3. To facilitate early identification and response to students experiencing difficulty in making the adjustment to college life.

In order to achieve those aims a variety of likely strategies were selected:

1. The program faculty would serve as academic advisors to the students. Each instructor had ten students who would remain advisees until a major was selected.

2. There would be several extra and co-curricular events such as an "open house" social hour and a trip to NY City involving all the students and faculty. During the semester we would take turns being available in the Student Dining Room for informal "coffee clatches."

3. The program faculty would learn more about the other courses in the program and plan ways in which connections and reinforcements among the courses might best be achieved. Course syllabi were circulated as were all the texts to be used by students, and faculty dialogues would continue throughout the semester. In addition, several joint assignments would be made throughout the semester to facilitate interdisciplinary activity.

4. The faculty would meet weekly to review course progress, upcoming exams and assignments and to assess student performance.

We also realized that this project would need to be carefully monitored. If the project realized our hopes, we wanted to be sure to have "evidence" that would command attention. The evaluation design that was constructed relies on a variety of assessment activities. A questionnaire is administered to the students at the end of the semester and a modification of the original questionnaire is sent to all participating students at the end of their second semester to provide a more reflective and retrospective assessment of their cluster experience. In addition, participating faculty complete an essay in which they share their experiences, reflections and recommendations. Finally, an ongoing longitudinal study monitors such factors as student retention, academic success, and choice of major.

This program design was presented to the Vice President for Academic Affairs to enlist his moral (and financial) support. Modest stipends were made available to encourage some summer meetings of the faculty. All matriculated freshmen who were undecided about their major received an invitation to participate in the cluster. The focus on undecided majors was necessitated by the fact that most majors required specific courses beginning in the first semester of college. Fifty-two students were eventually enrolled when the program began in the Fall, 1989 semester. At the conclusion of the semester an initial assessment was completed.

The overall judgment offered by the students was encouraging. Their responses suggested that the program had been successful in facilitating their adjustment to a new environment. In particular they pointed to the friendships that were formed so quickly as a positive outcome of their shared experiences. The students also reported a clear sense that the faculty knew them, cared about them as individuals and could be counted on to listen to any and all of their problems; an attitude that has persisted to the present. Many also believed that they had become more aware of the connections among and between the subjects that comprised the cluster. They were unanimous in encouraging the continuation of the program.

The faculty assessments tended to reflect on the gaps between original goals and perceived achievement. All agreed that some progress toward the goal of integrating regions of knowledge had been made, but at the same time we judged that the program had fallen short of our original, perhaps idealistically conceived aims. We learned that there was a substantial gap between the coordination of assignments and the integration of ideas. In addition, it became very evident that in co-operative teaching there is no free lunch. We learned that it took far more time to teach in tandem than to devise and teach a course independently. The level of cooperation that we discovered to be necessary for an undertaking such as this required far more substantial preparation than we had been able to achieve in a few summer meetings. Once the semester began, the expected intellectual dialogue that had been anticipated through interdisciplinary lectures and debates never materialized. Our schedules (classes and committee service) did not permit any of this and we judged that to have been a major loss.

At the same time, the participants all cited the benefits of the relationship that developed. We became valuable sounding boards for one another. We were never academically or pedagogically "lonely"; we were continually supported and challenged by the dynamics of our colleagues' opinions and approaches. We judged that perhaps the most successful aspect of the project was our continual monitoring of students' progress. Our individual teaching and advisement efforts to respond to problems benefitted substantially from shared information and insights. The same was also true when a student seemed on the verge of a positive breakthrough; reinforcement and encouragement were sustained in all the other classes.

The faculty also concluded that future clusters ought not be a full course load. Freshmen could benefit from having some exposure to upperclass students as role models. We agreed that perhaps three would be an optimum number for a cluster.

These assessments were shared with the Marist community through a series of presentations by the cluster faculty. We were clear about our reservations, yet also enthusiastic about the possibilities for future semesters. Apparently the enthusiasm was infectious for in the Fall 1990 semester there were five clusters, several of which were made up of the original faculty who had recruited other colleagues. In the Fall

1991 semester there were six clusters involving sixteen faculty and more than one hundred freshmen students.

We now have longitudinal data on all but five of the original cluster students through their junior year and the information is encouraging:

1. Thirty-nine (75%) are still full time Marist students. This compares favorably with a cohort retention rate of 60%.
2. These students are enrolled in eleven different major programs of study of which two-thirds are in traditional humanities areas.
3. The majors with the heaviest concentrations of students include English (15%), Elementary/Special Education (13%), and Psychology (15%).
4. One student, in good academic standing, is on leave this semester but plans to return in the Fall.
5. Five of those who left Marist are attending other colleges, four of which are state schools. Two others are working full time and sporadically enroll in community college classes.

This profile suggests that perhaps the academic benefits of the program may have been more significant than we faculty originally thought. That impression has been reinforced by comments of students in formal and informal settings. A high priority for next year is the introduction of "qualitative assessment." Through structured interviews we will try to get a better understanding of the degree to which the program pointed them in the right directions in terms of intellectual integration and interdisciplinary connections. One simply cannot get at this element through surveys and questionnaires.

After three years of development the cluster program now seems fairly secure on the margin of the College. I do, however, have serious reservations as to whether it will ever move into the mainstream and my reservations have little to do with money. To be sure, the program requires funding support, not an easy prospect at a time when the administration is trying to cope with two successive years of state cuts in aid to higher education. Yet even if funding were forthcoming to support summer planning grants and reduced teaching loads, the cluster project faces formidable obstacles which I believe are deeply embedded in the culture of higher education. To paraphrase the immortal insight of Walt Kelly, " Sometimes we are the worst enemies of our own hopes." By way of example let me point to several features of faculty life that have struck me as I have worked with colleagues these last three years.

One strength of the project thus far has been that participating faculty have been volunteers. All report that they were attracted by the opportunity to work in self-selected groups. They also note with satisfaction the fact that they have been given a great deal of latitude in designing clusters with elements unique to their interests, talents and inclinations. The six clusters offered last semester varied tremendously in the range of common assignments, the level of social activities planned or the degree of integration required, to name but a few features. We wanted no repeat of the arguments over "academic freedom" that haunted the earlier Core effort and we clearly have been successful in that regard.

Yet I cannot shake the feeling that there should be some common threads linking each of these clusters. Whatever their individual differences, should not each cluster support a united faculty effort which aims to achieve common educational purposes? Without such qualities the cluster program could wind up being still another, even if a different, version of that intellectual smorgasbord we once (and still) call Core. I remain perplexed as to how to effectively tap the strengths of so many dedicated individualists and channel them in a common enterprise.

I have concluded that one of the most significant barriers to be overcome in this regard is the tradition of faculty autonomy, of unfettered individual scholarship and academic freedom. Inside the closed doors of each classroom the authority of a tenured professor is virtually absolute and this condition has not been challenged in the designs of most of the clusters. Yet truly collaborative teaching requires a diminution of one's own autonomy and authority. Nothing has been more difficult for participating faculty than the task of modifying their own courses in accordance with the views of others. Each of us invests a great deal of time and effort in designing our courses and the prospect of eliminating a favorite topic or reading, or modifying a particular approach (which we know to be uniquely brilliant) can be mildly traumatic. The whole thrust of our graduate training has been in the tradition of the lonely scholar; it is a mind set that is difficult to modify. Consequently we do not often see ourselves as part of an interrelated network in which the success of our course depends on the work of others.

I was rather startled by another judgment shaped by my cluster experience because at Marist College, with roots deeply shaped by a Monastic Order dedicated to teaching, the instructional role of the faculty has continually been identified as a high priority in decisions relating to salary, promotion and tenure. This is a tradition that enjoys both administrative and faculty support, and I believed that the cluster program could tap that support and dedication.

To a great degree, participating faculty have manifested a genuine desire to create an effective instructional program. Yet I believe that the cluster format made heavy demands on participants in terms of their teaching. Participation required important changes in the faculty's sense of what teaching is really all about and how difficult the tasks can be. We learned the extent to which successful teaching requires a shift in focus from the subject matter to the learner. We had to acknowledge that teaching cannot be discussed simply in terms of the behaviors of faculty but must also embrace an assessment of the growth of the students as well. We had to come to believe that professional preparation might entail more than a disciplinary focus and that research on learning could now be regarded (Gasp) as part of one's own "field." An individual class in which there is no lecture given may require several hours of careful preparation of student activities.

It has become evident that in the existing climate of the College nurturing such changes in attitude and behavior is extremely difficult. More often than not the faculty is as guilty as anyone of perpetuating an unconscious (?) bias toward classroom instruction. Peer reviews and promotion committees may applaud classroom work, but rarely recommend without evidence of "scholarship." Deans and Presidents may applaud the teaching tradition, but in today's competitive environment they want faculty to be more "visible." One inference of these prevailing tendencies is that teaching ought not be regarded as so demanding that you can't do other things on the side such as write a few articles, sit on a few committees, or get a couple of grants. Yet the cluster experience has dramatized in my own mind the incredible investment of creative energy that is demanded of one who wishes to make student learning the centerpiece of their efforts.

Despite these reservations, I remain hopeful that the cluster program can be a catalyst for institutional change. Surely our institutions can only benefit from a new climate on our campus in which faculty come to see one another as sources of support and growth in a common enterprise. Certainly our students will be the richer if there is a genuine emphasis on the not so visible but yet so significant art of teaching. Perhaps, for now at least, the cluster program can best play that role in the margin.

TEACHING IN PRISON, OR LEAR HE KICKED CORDELIA TO THE CURB; HE BUY HIS CLOTHES AT K-MART

Patrick W. Venneri

Teaching in prison is to be a "stranger in a strange land." From the time the door clangs shut behind you, until the time comes for the guard to let you out, the teacher in prison relinquishes his freedom and joins the captivity of both guards and students for three hours. These hours can either be the most productive teaching ever experienced or a dismal failure both of communication and of technique. The teacher of student-inmates will either be rewarded as he watches his efforts take root or be disabused of the effectiveness of his teaching methods in a non-traditional setting.

Within this country there is a population of American citizens who find themselves exiles in their own land. They are isolated from the population at large, having been resettled in an alien environment with a dominant group in control of them. Within this controlled and prescribed environment the exiles must adapt to the prevailing reality without sacrificing their cultural ties. In order to do this they have developed their own rhetoric and rhetorical devices. They accommodate this language difference and embrace it in reality, because they are essentially powerless and disfranchised. So as with any sub-group their acquisition of a unique language insures their voice and even survival. As for those who teach in prisons they must re-orient themselves to a hostile environment from the prison administration, and it is as imperative for them to learn the student-prisoners' speech as it is for the student-prisoners to integrate themselves into the studied and artificial language of academia. It is not only a learning to "write across the curriculum," but also across cultural and rhetorical differences. The professor will be immersed in a teaching situation that will be alien to the traditional orientation of most teachers. Where there was a tacit acknowledgement of the students trusting and accepting the teacher, in a prison setting he will have to cultivate the trust and win the respect of his student-prisoners. The interesting exchange that takes place makes this effort

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more than worthwhile because it deals with the use of language to mitigate what Freire and Faundez call the "tension of the uprooted."

> One of the basic problems facing exiles lies precisely in how to resolve the acute tension between being uprooted, of which they are victims, and the need to put down new roots, which can only be within certain limits. If you put down roots too deeply in your new environment, then you run the risk of denying your origins. But, if you put down no roots at all in your new environment, then you run the risk of being annihilated in a nostalgia which it will be difficult to free yourself from (Freire, Faundez pp 4-5).

Certainly, though the authors are referring to an exile from one's country, this same concept is directly applicable to the life of a prisoner. Prisoners are literally exiled from one life into the artificial construction of a regimented, structured incarcerated reality. Within this reality they must formulate roots, but these roots are as artificial as the very ethos into which they have been transplanted. If the roots take hold too deeply, the prisoner runs the risk of surrendering totally to the self-effacing limits of the prison experience. But if they put down no roots at all they are risking the alienation and oppression of both their fellow prisoners and the keepers of the system, both groups demanding behavior of prescribed acceptability.

An important root necessary for the very survival of the exile in the prison system is the mastery of a subversive voice. Any attempt on the prisoners' part to assert verbally is met with resistance and hostility on the part of the guards and administration. The student-prisoners, then, because of the nature of their exile and the need for any subservient group to fashion a language outside the knowledge of the power elite, have developed their own language to deal with reality. This language which is rich in metaphor and simile is an "other's" language. This sub-set of rhetoric can be appropriated by academia to enrich its discourse in the humanities. Since the professor expects these students to accommodate his language, they will also expect the instructor to be concerned enough with their thoughts to learn their language. At the same time teaching in a prison can provide an opportunity for the academician to test his verities on a group who have no vested interest in appeasing the professor.

The instructor in a prison setting must prepare himself for other disjunctive factors besides language: Prisoners being sent to the hole; lugged to other facilities; taken out while in class for any number of reasons (especially disconcerting when the student-prisoner is shackled right in the classroom and removed). The professor must make a contract with the students at the first meeting that he will follow them, if not physically then by mail, so that what is started can be finished. It is especially important for them to know their value and effort as students is appreciated, reinforcing in them the worth of their undertaking.

The biggest difficulty in a prison is not the student-inmate but the guards and the administration. I remember an incident at Concord Prison in Massachusetts when a creative individual (not one of my students) while loading a furniture truck decided to load himself as well. The guards having become lax, since there had been no breakout in years, were not performing their duties with the diligence they should have. This blithe spirit was carted away with the furniture and made it to Virginia where good old-fashioned American family ties asserted themselves and the lad's grandmother picked him up and returned him briefly to the bosom of his kin. Meanwhile, back at the ranch, four of my students who also worked in the furniture shop witnessed the occasion and true to their own code of "honor" (more about that later) said nothing. The guards were fired. The rest of the prisoners who were loading the truck were immediately put into the hole. From there, after affirming their desire not to divulge information, they were immediately lugged all over the penal system, and ultimately put into various maximum security holes for "protective custody." But since these first-time college students had my home address they wrote to me, and I made arrangements to visit one and correspond with the other three so they could complete their first college course, English 101.

One of the first dictums that the administration will impart to a professor will be the need for absolute secrecy as to the professor's address and telephone number. Horror stories will be told of unsuspecting teachers falling prey to the wiles of the inmates, giving out personal information and becoming victims of their students. "Remember this is JAIL, NOT YALE," a Catholic nun admonished me at a medium security facility. The prisoners, of course, are aware of how the administration perceives them and of the orientation that the new professor is receiving. They will be exceptionally interested in what pieces of polemics the professor bought into and how his perceptions have been molded by the administration's orientation. When entering the class I immediately write my home address and telephone number on the board. This is generally greeted with "Don't you know you can't trust us? We'll rob your house, rape your wife and if you give us a bad mark kill you." I will suggest to would-be teachers in prison, you either have students, as good or bad as your traditional students, and you offer them the respect you would accord any of the traditional students or you will be ineffective in an incarcerated setting.

The goals of the keepers of the institution are diametrically opposed to that of the teacher. The administration and guards desire a population that is essentially voiceless, certainly not assertive, and most assuredly not questioning. The very elements that a professor is striving to encourage in both traditional and non-traditional students are actively discouraged in a prison setting. In basic composition we stress the active voice. We expect students to hone a strong, well-defined voice. Everything in the day-to-day prison routine is designed to discourage just this very practice. The guards will be actively antagonistic toward the teacher, generally voicing one of two complaints: "Why help scum-bags when there are so many others that cannot attend college," or "I cannot get a free education, so how come these animals can?" The answer to the latter of these questions is easier than the former, since the education is certainly not free, being paid for by Pell grants.

The second question is much more germane. Why indeed help murderers, rapists, con-artists, thieves and dope dealers? The answer is amazingly simple. It is not a liberal desire to do good for the poor "misunderstood" lad and lasses suffering behind bars. It is, believe it or not, a very conservative position. It costs, depending upon the state you are in, between fifteen and thirty thousand dollars to keep one person incarcerated for one year. I propose that money could be better spent on educating our less fortunate students who are being squeezed by the nation-wide budget cuts in all educational settings. If we provide the student prisoner with an Associates or a B.A. and in some case even an M.A., there is a much better chance that that person will become a productive member of society, paying taxes rather than using taxes which should be going to public education. But in order to get the inmates interested and involved in the educational experience, a necessary ingredient must be supplied by the professor.

The academic, whatever discipline in which he is engaged, comes replete with his own language. And as with any priest or priestess the learning of the language of the discipline is what delineates us, defines our expertise, and allows us to hold holy discourse with others in our field. We carefully initiate the fledgling into our discourse, vigilant that the purity of the terms is passed down correctly, so we are all on the same page at the same time. It is language and situation with which we are concerned. As an aside, and I certainly include myself in this statement, in a bemused state while listening to some of our conversations I am reminded of the mantle of dullness being passed down to Shadwell. Especially in the prisons the professor must be willing not only to learn the prisoners' language, but understand its relevancy to the humanities. The students must be accepted into what is generally a new world for them.

This world is academia. With time on their hands (and I start off my introductory lecture in prison by quoting from Shakespeare's Richard II, "I have wasted time, and now doth time waste me."V-v:49) I use this quote as a major trope. And this is what I feel becomes a major thrust of the new rhetoric that must be used in either prison settings or in any andragogical setting; using a concept they deal with daily, "time," the professor can demonstrate how the humanities are relevant and accessible, NOW, to the student-prisoners. The student-prisoners have the time to reflect back on a life that needs challenging and restructuring, and these students are looking for a response from academia.

Since the vast majority of these student-prisoners are the marginal elements of our society, and in an incarcerated setting forced by the prison administration into a sameness, a generalized being, the first objective of the teacher is to provide a community into which these students can be accepted. That must be as a member of a community of scholars. Tom Gehring's statement, "When is a prison not a prison? When it is a school. When is a school not a school? When it is a prison."(Gehring) becomes extremely salient. The students must feel that they are part of a larger world-wide community with the students in the Universities of Yale, Oklahoma, Alabama, or Virginia, entitled to the same respect and dedication the instructor accords the traditional student. In the student-prisoners it is this according of respect, as fellow scholars, which is a necessary ingredient to their re-imaging of themselves and to provide an impetus for the intensity with which they will pursue their goals.

First they need to feel that they are the same as any other college students. If the professor does not believe they are the same, if he tries to "shuck" them that he thinks they are comparable but really does not, the students will immediately know it. Coming off the street and prepared to believe that all life is a con, they are determined that no one from academia will be able to either "dummy down" or condescend to them ever; and that is a tough audience to have against you. So the rhetoric that is used by the professor in the initial lecture will become emblematic, in the student's mind, of how the course will proceed. And if he blows it, one half of the class will be missing next period. (Rejection from **that** audience is the ultimate rejection: hell, they'll do most anything to get out of a cell for two or three hours.)

When offering the introductory lecture in a prison, be it a freshman composition or a literature course, the first item addressed is not the syllabus but who wrote the syllabus. Even more important than who wrote it are these political questions: What was the bias of the professor who determined what works are to be read? What gender positioning is inherent in the literature selections, and what is the underlying philosophical or sexual agenda being propagated? As important as these questions is the destruction of the long cherished and dearly held myth of the professor possessing truth. Concomitant with this demythicizing of the professor is the elevating of the student from passive receptor into active participant. In a prison this will only occur if the students trust you and know that you trust them. Listen up: This is not the Pollyanna claim that "there is no such thing as a bad boy," but rather an acknowledgement that this is the last grab at the golden ring and they cannot afford to blow it. It is here where language takes on its biggest challenge as a bridge builder.

There is a real need to meld the rhetoric of academia with the street parlance of the audience. But even in elementary composition when we teachers are addressing traditional students we refer to the rhetorical triad of writer-audience-text and stress to our students the necessity for all three working together; so the incorporation of the jargon of the prison and the street with academic parlance is neither an anomaly nor a dilution of the language of academia. Rather, as my title suggests, what dynamic expressions a student-prisoner might add to the language of academia, providing another entry level into the humanities.

What more appropriate way of discussing Lear and his relationship to Cordelia than as one of my students in Norfolk Prison did. Upon reading Lear he started the discussion by exclaiming, "That Lear, he kicked Cordelia to the curb!" That immediately gave the other twenty students a way to attack the problem of fathers, children, friends, friendship and authority without first learning the "proper language" of literary discourse. From this came the last statement on Lear from another student, "He buy his clothes at K-Mart." And if this remark leaves this audience as puzzled as it left me the first time I heard it, I will explain, as they explained to me, that only the lowest would buy their clothes at a tacky place like K-Mart. Remember that status in the sameness of a prison depends on little things, like the quality of clothing or foot gear that you wear. So, ultimately, just as a sophisticated audience eventually realizes that Lear should not have been so foolish at such an advanced age, so too do the student-inmates realize that Lear's judgment is flawed; just another way of discussing the same reality.

If you are really up to an argument, try convincing a group of beings who have no participation in the larger society that they should abandon their "friends" no matter what the reason. Try and persuade a group of convicts that good Prince Hal's decision to kick Falstaff to the curb is justifiable because Falstaff is a vice character and giving the Prince wrong advice. Listen to the opposing polemics on friendship being the only trustworthy steadfast concept to hold on to and you can understand the students' problem with Hal turning his back on the old man. And then comes the ultimate rush for a teacher. Watch as your students grappling with moral and philosophical problems remap (a buzz word in the moral determinant school of teaching) their own moral landscape.

Young Miguel, doing fifteen years for dealing, writes about the profits and perks of the local drug dealer. His Porsche and gold chains turn up again and again in various composition papers along with his total enjoyment of the good life. When I tired of his flights of imagination I suggested a paper on the various business drawbacks of dealing. When he considered the fifteen years stretching in front of him in the writing of a paper he made a moral decision to change his occupation. Being in the humanities I could not in good conscience try to interest him in a job in academia, since at the time I was receiving eighteen hundred dollars a course teaching in the prisons, so I did the next best thing: I suggested a career in business. (By the way, I have received innumerable suggestions on either a career change or how to augment my meager salary, but Mrs. Venneri's son being no one's fool [with a small f] graciously declined their generous advice.) Miguel immediately saw the benefits of doing with a brief case what he had been doing with drugs and has set himself the goal of obtaining an MBA from Harvard. I will provide the recommendation and God pity the business community.

The implications of just what can be accomplished in the confining world of incarceration as we open the humanities to those who did not even know it existed may be best understood in the following poem, Ishmael Reed's "badman of the guest professor" of which I have excerpted the following:

youve been teaching shakespeare for
20 years only to find d joke
        on you
d eavesdropping rascal who got it
in d shins because he didnt know
enough to keep his feet behind d cur
tains; a sad-sacked head served on a
platter in titus andronicus or falstaff
        too fat to make a go of it
        anymore

its not my fault dat yr tradition
was knocked off wop style & left in
d alley w/pricks in its mouth. i
read abt it in d papers but it was no
        skin off my nose
wasnt me who opened d gates & allowed
d rustlers to slip thru unnoticed. you
ought to do something abt yr security or
        mend yr fences partner
dont look at me if all dese niggers
are ripping it up like deadwood dick;

doing art d way its never been done, mak
ing wurlitzer sorry he made d piano dat
will drive mozart to d tennis
        courts
making smith-corona feel like d red
faced university dat has just delivered china
        some 50 e-leben h bomb experts

(Reed 284-5)

I will close with a quote from Freire who identifies a problem which I hope will be solved by our educational establishments. (If you are reading this and you are the first person to contact Sally R. before the end of the conference, you have just won $10!)

> There is no such thing as a neutral educational process. Education either functions as an instrument which is used to facilitate the integration of the younger generation into the logic of the present system and bring about conformity to it, or it becomes 'the practice of freedom,' the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world (Freire p. 15).

Since in any prison we have a population whose voice the prison administration would just as soon reduce to complaisance (if indeed they have to have any voice at all), an administration actively antagonistic toward questioning and inquiry, and if the function of education is the encouragement of the questing mind, just which one of Freire's attitudes toward education will the professor take into the prison setting?

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DECENTERING THE TEACHING PROCESS

DEVELOPING CLIENT-CENTERED COURSES

Elizabeth A. Hansen

The teaching process is traditionally thought of as centered around the teacher and the interaction between the instructor and the student. The aim of this paper is to focus thought and action, not on the teaching process but on the students' needs. The learner needs to get from Point A to Point B in the educational process. We should be able to choose the teaching process that best fits the situation taking into consideration time, costs, availability, delivery systems, clients, and human resources. Different teaching processes, delivery systems and how to center your course development on client needs are highlighted in this paper.

Since the time of Socrates, we have had the image of the ideal learning situation as one of the student sitting at the foot of the teacher catching the pearls of wisdom dropping from the learned instructor's lips. Research tells us otherwise. The teaching process can be centered around print materials as in the case of correspondence courses. The teaching process can be centered around a particular media such as television courses or video tape or computer-aided-instruction. In fact, the teaching process can be centered around a multiplicity of ways to help the learner achieve the goal of learning.

Leonard Freedman in *Quality in Continuing Education* said that, "with the student dominating the theory and practice of continuing education, it is natural that the designers of continuing education programs should make student preferences their starting point."[1] He also pointed out that what a student wants or needs is not necessarily what he or she really needs. Students want short programs but how can the subject matter be covered? Students want no time limits but how can they be motivated to finish? Students want "fad" courses but the university might believe these topics to not be intellectually sound. What students claim they need might not be related to what the institution believes to be appropriate.

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In the design of courses, you must balance the student's perception of what they need with the content expert's (the professor's) view of what the student should have in the context of the sponsoring institution's mission and values. David Grossman states "The development of technologically delivered instruction is highly complex . . . quality instruction through this means requires that such courses be considered the same as, and not different in any way from, conventionally offered courses."[2] Typically, when something is different than on campus, it is thought of as inferior. Faculty working on course development should be asked to develop the same course that would be offered on campus but to use their creativity in choosing the delivery system that will best enhance the material and allow the student access to the same high quality education that they could get if they had access to the campus.

There are different views on how to teach adults. Writers such as Malcolm Knowles call the art and science of helping adults learn, androgogy.[3] In designing courses you can focus on the older adult being more self-directing than younger adults. They also have more life experience to bring into the classroom and participate more than younger adults. This allows the format to vary more in adult education, from study-discussion programs, independent study, industrial training, and compressed format classes.

A way to develop courses that can be used in a variety of delivery formats is to divide the course into comprehensive learning modules that can be used in independent study or with an instructor. I will explain how this is done in independent study which is one of the most challenging ways for a student to learn.

Mastery-based Comprehensive Learning Modules

The Independent Learning Package is comprised of modules that allow students to achieve certain instructional objectives. The emphasis is on the students' mastery of the material at their own speed rather than on the activities of the instructor. The instructor is not the disseminator of information but serves as a mentor, a resource person, an advisor, and a guide. The student has to take greater responsibility for their own learning than in a traditional classroom situation.

How to Develop Modules

The mastery-based comprehensive learning module is a stand-alone piece of instruction that is developed around very specific and well-defined objectives. All the materials needed for the module (e.g., text book, study guide, video, audio tapes, handouts, reading lists) are correlated to each other by the learning objectives. For example, if a learning objective in a computer science course is "Identify a properly formed Pascal variable" then the student would be guided to the pages in the text that refer to this; the self-test questions in the study guide, the section on the audio or video tape, and examples on handouts would also be correlated in this fashion. This method requires a large amount of work up front in the development of learning materials on the part of the faculty and the instructional designer.

What the Module Looks Like

A module would vary depending on the subject matter. Modules should be comprised of topics that are related and usually the student takes some sort of assessment and must exhibit mastery before going on to the next module. A sample module outline would include an introduction, learning objectives, explanation of materials and activities, and a self test over the objectives. The introduction should include prerequisites, how the content of the module relates to specific educational goals and the needs of the students, and how the module fits into the overall course. The objectives tell the student what he or she needs to do to complete the module. The objectives are stated in measurable terms. Rather than saying "to understand" or "know," use terms such as define, identify, distinguish, calculate, compare, design, choose, draw, or write.

The student is tested over the objectives. This means that the tests are tightly correlated with the learning objectives. There are no test questions that are drawn "out of the blue" in that if a topic is important enough to test over then it is important enough to be specified as a learning objective. An explanation of the materials needed to complete the module and a clear explanation of the activities involved is important. The designer should be thinking of possible limitations on the use of the materials. For example, asking students to have access to a VCR is not a limiting factor anymore but asking a student to have access to a CD ROM drive on a computer can pose problems at this point. A self diagnostic test is a necessary form of feedback to help the student determine if the educational goals have been met. The test questions should be keyed to the learning objectives so that if the student misses a particular question, he or she can refer back to materials that relate to the topic or materials that will give additional help on the topic.

How the Modules Can Be Used to Meet Students' Needs

Once the course is divided into Learning Modules each with its corresponding materials and instruction, the course can be centered around the client. If the students need a compressed format course (four weekends), the instructor can decide which modules would be done by the student as independent study and which would be covered on the weekend in class, thereby covering all the material needed to complete the course. If the students want a relaxing of time limits, the modules can be used as mastery-based learning packages wherein the student will take a module exam when he or she is ready and cannot go on to the next module until mastery is achieved. In order to keep motivation high, the course itself should have a time limit but the student can go through the individual modules in a self-paced manner.

Interaction

One of the common beliefs about the teaching process is that the interaction between the student and the instructor is one of the most important variables in order for a student to learn. If you look at what this interaction is comprised of you can see how this interaction need can be met through other methods. The instructor through classroom lectures emphasizes what is important to learn or do for the course, the learning objectives can do this. Going to a lecture in the classroom helps organize the student's time, gives the student deadlines to meet, and facing the teacher helps the student be more accountable. A well-designed independent study course can do the same. Modular design allows the student to set their own schedule of examination dates. Each module is subdivided into units that organize the student's time. Reminders throughout the materials help students to recall deadlines. Students who are not sending in homework or finishing modules in a timely way can be held accountable by concerned calls or letters from staff, counselors or faculty.

Choosing the Best Learning Process

The entertainment industry assumed that in order to see a movie people would appear at a certain place (the theater) at a certain time. Now with the advent of VCRs, customers have shown by their purchasing power that they want to watch movies where and when they choose. Industries are becoming more client centered. As people expect better service for their dollars in other areas, they will come to expect more client-oriented service in education. The most common teaching/learning paradigm is the one that assumes you must have the teacher and the students in the same place at the same time in order for learning to take place. Once you free yourself from this assumption you have the opportunity to design the learning situation to fit the needs of the student. The following chart can help you organize the time/place decision.

Types of Delivery Systems by Student's Time and Location Restrictions

	Time Restrictions	No Restrictions on Time
Restrictions on Location	Classroom, Satellite Teleconference	Computer lab
No Restrictions on Location	Broadcast TV Audio Teleconference	Video tapes, CAI, Print, Audio tapes

Before you start the development of a course you must look at who you are serving and your available resources. The following questions should be answered:

1. Who are your clients? Are they single mothers who need childcare facilities? Are they people who have full-time jobs during the day? Are they bilingual? Decide where your students are and when they can attend by doing some marketing. If they are centrally located and have jobs during the day, traditional night classes would be appropriate.

2. What resources do you have? Do you have faculty who will teach at night? on weekends? compressed format? Can you open a branch office? Can you get an 800 number? Can you mail materials to students?

3. What delivery systems are available to you? Traditional classrooms? Print based materials? Audio tapes? Video tapes and VCRs? Satellite conferencing system? Compressed video? Broadcast television? Electronic mail system? Computer-Aided-Instruction? CD ROM?

4. What delivery systems are available to the student? Are they visually impaired? hearing impaired? Are they able to attend scheduled classes? Have access to VCR? Cassette player? Have access to a computer? IBM compatible or MAC? Modem? CD ROM drive in a computer?

5. What is your time line for delivery? Time to train faculty on compressed video, television, satellite conferencing?

6. What costs are involved? Can you get a grant to underwrite the high cost of certain technology? Can you set up a consortium of schools to share technology? Purchase or lease equipment?

Monty McMahon, Director, University of Nebraska-Lincoln, mentioned in a talk at Brigham Young University[4] that proposed technology must pass a test before you jump into it, just because it's there doesn't mean you have to use it.

McMahon's Technology Test

1. Start-up equipment costs. What new equipment do we have to get?

2. Development costs. Can we develop a quality product?

3. Student accessibility and costs. Will the passed-on cost deter students from enrolling? Will the students have the necessary equipment or accessibility?

4. Service costs and manageability. Will we be able to package the course and deliver the product in a cost-efficient way?

Even after the most careful consideration of delivery methods, costs, and resources, the basic consideration is still the student and how the student will interact with the learning process. Michael Beaudoin points out the shift from the teacher being the source of information in the learning process to just being one of the sources available to learners who are active participants. He states, "This is a difficult and threatening situation for teachers, most of whom are themselves products of classroom-bound education and whose professional identities are linked to the traditional image of the teacher at the front of the classroom and at the center of the process."[5] Instructors who have developed mastery-based learning packages find they are more efficient and feel they provide a higher quality learning experience for their students. By tightly defining objectives, instructors focus on what is important for the student to know rather than on the fluff. The de-centering of the learning process will allow us to better serve our clients needs. With careful design of courses we can maintain quality and integrity and still meet our students' changing demands.

Endnotes

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ENGLISH AS A DEMOCRATIC PROCESS: STUDENT DIRECTED LEARNING

J. E. Tanner

Student Directed Learning is a participatory educational process in which students decide how and what they want to learn. It finds its roots in a long tradition of educational philosophy which counted as important freedom of the learner and the democratic process. Premises about the teacher-student relationship are discussed with respect to democracy and power in the classroom and in institutions as a whole. Then a case study of students at a private university in Puebla, Mexico, who directed their learning of English will be described. Finally, the implications for teacher directed vs student directed learning with respect to foreign language learning will be discussed.

History

The spirit behind the learning and teaching process to be discussed herein is nothing new under the sun. In fact, it dates back at least as far as 400 BC to Plato's Republic (VII, 536) in which Socrates says to Glaucon, "The free man should learn no study under bondage. And while enforced bodily labors do no harm to the body, study forced on the mind will not abide there" (Lindsay, 1935). The Platonic view of learning, we can see, assumes a principle of freedom, of avoiding compulsion.

This concept of freedom in education has accompanied us throughout recorded history. We recall the works of Comenius of France in the early 17th century, and the treatise, Emile, written in the late 1700s by Rousseau, the French philosopher, who is considered the founder of the notion of freedom in education. Contributing to further development of liberty in education was Froebel of Germany whose beliefs were along the same lines: "Wisdom is shown when one educates oneself and others in freedom and self awareness . . . Basically, therefore, educators must be permissive and following, guarding and protecting only; it should

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neither direct nor determine nor interfere" (Lilley, 1967, p 50-51). The same spirit was also imbued in the teachings of two Italians, Pestalozzi, and the doctor, Montessori, whose work originated in the early 1900s, and is still carried forth in many parts of the world by schools bearing her name.

No name in North American educational history is more closely linked to freedom and democracy and to the role of education as an instrument for transforming society to its most democratic ideal than that of John Dewey whose prolific writing and thought beginning in the 1920s transformed American education. His viewpoint with respect to student liberties in learning is expressed well in the text, *Experience and Education* (1949): "There is, I think, no point in the philosophy of progressive education which is sounder than its emphasis upon the importance of the participation of the learner in the formation of the purposes which direct his activities in the learning process, just as there is no defect in traditional education greater than its failure to secure the active co-operation of the pupil in construction of the purposes involved in his study" (p. 78). This tradition has crested and fallen throughout the century. Two particularly influential movements in more recent history have been those led by the humanistic psychologists, exemplified by Carl Rogers in *Freedom to Learn* (1970) and George Brown in *Human Teaching for Human Learning* (1971), and critical pedagogists (eg. Aaronwitz & Giroux, 1985; Finkelstein, 1984; Green, 1986) given impetus by Brazilian Paulo Freire in *Pedagogy of the Oppressed* in the 1960s.

Obviously not all educators have been concerned with either individuals' freedom to make learning decisions nor about education's relationship to democracy. Take for example, James Mill, father and educator of John Stuart Mill, who once wrote that "pleasure is the end and generally speaking, the only end of all human behavior" (Burston, 1969, p. 12). His philosophical stance with respect to learning reflects this psychological hedonism: "The end of education," he wrote, "is to render the individual, as much as possible, an instrument of happiness, first to himself, and then to others" (Burston, 1969, p. 16).

Another individualistic view is found in *Education through Art*, by Herbert Read (1945). His premise is that aesthetic sensibility is the fundamental issue. For Read, "the most important function of education is concerned with . . . psychological orientation, i.e. adjustment of the subjective feeling and emotions of the objective world" (p. 5). What is important, he continued, is: "the education of those senses upon which consciousness and ultimately the intelligence and judgment of the human individual are based . . . It is only in so far as these senses are brought into harmonious and habitual relationship with the external world that an integrated personality is built up" (p. 7).

Sharply contrasted with these democratic, individualistic and psychological philosophies are the "learning for the nation" biases of two renown Mexican educators in the early 1900s. First, we have Justo Sierra, the first head of the Secretary of Public Instruction and Fine Arts, and the most eloquent spokesman for compulsory public education, despite the belief that it was a "tyrannical attack on the rights of parents." Parents of Mexican children could be fined or jailed for failing to educate those between the ages of six and twelve. Sierra's speeches suggest that the spirit behind this revolutionary proposal for Mexican public education was not so much devotion to the freedom and right to learn but instead a recognition of the country's need for a more productive populace. In fact, he believed "the rights of society to survive and prosper conditioned and superseded the rights of individuals within the society" (Vaughn, 1982, p. 64).

Following him was Jos Vasconcelos, a European elitist who became rector of the university in Mexico City. His ideal was to make people acquainted with the free thought of Europe. With the same production orientation as Sierra, Vasconcelos once said in a speech to congress: "Let us take the campesino under our wing and teach him to increase his production through the use of better tools and methods" (Discursos, p. 12, cited in Vaughn, 1982, p. 145).

The contradictions between ideal and practice are obvious; liberties are in conflict. Shall the individual choose if and what to learn, or shall the state provide the resources and compel people through education, to be more productive. We have arrived full circle, from educational philosophy embracing freedom to learn, happiness, and aesthetics to principles involving compulsion to learn, and restrictions on freedom not to learn in favor of the state's need for greater productivity.

According to a number of recent authors in Britain (Wringe, 1988; Wright, 1989) and the United States (Giroux and McLaren, 1986; Wilshire, 1990), this is also where Western educational philosophy has currently arrived. In discussing a conservative attack on the reforms of the last decade, Giroux and McLaren (1986) explain how teachers and curriculum are affected:

> At the heart of the present ideological shift is an attempt to reformulate the purpose of public education around a set of interests and social relations that define academic success almost exclusively in terms of the accumulation of capital and logic of the marketplace. This represents a shift away from teacher control of the curriculum and toward a fundamentally technist form of education that is more directly tied to economic modes of production (p. 218).

This shift also has serious consequences for the future of democratic society as a whole, according to the same authors: "In effect, the ideological shift at work here points to a restricted definition of schooling, one that almost completely strips public education of a democratic vision where citizenship and the politics of possibility are given serious consideration" (p. 221).

Democracy and Power

It is curious that in political discussions in the United States a great deal more is said about democracy and power regarding international issues than about domestic issues such as education. Let us further explore the meanings of these two terms. What is democracy? What is power? What words and phrases are associated with democracy and power inside and outside of the educational world?

In the American Heritage Dictionary of 1976 are listed three definitions for democracy: (1) government by people, exercised either directly or through elected representatives; (2) political or social unit based upon this form of will; and (3) social condition of equality and respect for the individual within the community.

Power in the same dictionary is defined as: (1) the ability or capacity to act or perform effectively; (2) a specific capacity, faculty, or aptitude; (3) strength or force exerted or capable of being exerted; and (4) ability or official capacity to exercise control or authority. If these terms are applied to learning institutions, power might be regarded as the ability or authority to act or exercise control over decision-making regarding educational tasks, and democracy as the social condition of equality and respect for individuals within the educational community. In every institution, department, and classroom, it is germane to ask: Who has this authority, this power? In some institutions, learning objectives are established by administrators or even government funding sources, relayed by department heads to teachers who are informed of not only what is to be studied but also how. Other relevant questions are: Who determines the schedule and class size? Who selects learning materials and who chooses learning and teaching methods?

More important is the question: Who is most capable of making decisions which affect learning? When institutions have predominantly inexperienced teachers, a department head may be the most competent decision maker; where experienced teachers are available, they themselves would likely make wiser choices. But decision-making must not stop at this level. Other key players are the learners. Reconsidering the definition of democracy, the social condition of equality and respect for the individual within the community, demands further inquiry: To what extent is the learner's view respected? To what extent do students (1) have not only the ability but also the willingness to learn independently?; (2) want to decide upon the goals, materials, and learning and teaching methods to be used?; and finally, (3) believe it important that they make decisions concerned with their education?

A Case Study

Having prompted consideration of democratic decision-making at the education institutional level, I would now like to describe a dilemma confronting me almost two years ago at the University of the Americas-Puebla, in Mexico. The predicament involved an English language course for low advanced learners. Not only was the English course itself compulsory, so was a grammar-based syllabus. The objectives of the course, determined by academic departments, not the service oriented English department, were to prepare students to read academic textbooks in English.

The group to which I was expected to teach English was not in the least homogeneous. Five or six students had proficiency levels appropriate for the standard curriculum. On the other hand, five or six people could understand no spoken English, however slowly and deliberately articulated. Neither could they speak in English. Between these extremes of practically beginner and nearly advanced learners were people with intermediate proficiencies. This is what foreign language educators call a multi-level classroom.

Many of the students in the class had completed prerequisite English courses, but in some instances two or three years earlier, with little or no English contact since. The result was apprehension at best, and in the worst cases, anxiety.

The semester began with a strategy to reduce the apprehension. Students enrolled in Spanish courses, most from the United States, were invited to attend the English class for peer tutoring, i.e. one-to-one language practice in both languages. They attended the first class meeting of the semester. After these visitors left, the first learner decision was contemplated: whether to continue this peer tutoring practice. After some discussion, all agreed that thirty minutes of each two hour class would begin by conversation practice with the North Americans.

Unfortunately, after two weeks, the attendance of the North Americans waned. Having made Mexican friends outside the class, this artificial speaking experience lost its appeal. Thus we pledged our allegiance to the official academic reading and writing syllabus. The motive for renewed student curriculum decision-making was the first lengthy academic writing assignment. It was to be a critical comparative analysis of three professional journal articles, self selected by the students. Despite a thorough explanation and previous practice in summarizing single articles, most of the papers submitted for a grade were poorly organized and written. Even worse, despite warnings, many numerous students had simply "borrowed" entire sentences and paragraphs. In other words, indiscriminate plagiarism characterized these reports.

Disappointment, frustration, and annoyance accompanied my realization that the syllabus (and I) had required a task well beyond the capacity of most people in the group. It was obvious that little English learning would occur if the official syllabus were observed. Drastic measures were required if these young people were to learn sufficient English to pass the course. In desperation and ignorance, I gave the learners responsibility for course planning for the following month, hoping that a means to effective language learning would be discovered.

The curriculum revision process was as follows: First, a homework assignment provoked individual needs assessment. Students were asked to explain or describe in three paragraphs: 1) their reasons for wanting and needing to learn English; 2) the skills and content matter which should be emphasized in the course (eg. writing, reading, speaking, vocabulary, listening, grammar or pronunciation); and 3) topics of interest and activities for classroom and outside of class work.

During the following class period, a group needs assessment took place. Students were asked to: 1) locate a classmate with the same skill learning priorities; 2) read each other's compositions and discuss topics and activities of common interest; 3) list topics and activities on the blackboard which were of mutual interest; 4) develop a plan for one month to include: a) topics or themes; b) in-class activities and materials; c) homework materials and assignments. At the end, they were also to decide upon a method of evaluation.

Two groups of students clustered immediately. One group's concern was the improvement of listening skills; these individuals understood virtually nothing spoken in English. A second group, the intermediate proficiency group, wanted to improve reading and writing skills. The remaining students, who wanted to speak more fluently and learn more vocabulary, had followed my instructions to the letter. They were seated in pairs, reading each other's compositions and talking in English. Shortly after these pairs were asked to form a single group, they begin organizing themes and activities for the coming month. The other two groups were far less adept planners, so the class period ended with a promise to continue with a multiple group planning session during the next class period. This was accomplished as follows: First, the small groups met to finalize their month plan. Second, the entire class discussed each smaller skills group's month plan. Third, interest in other groups' activities resulted in intra-group renegotiating and rescheduling, and a reworking of the individual groups' plans.

A monthly evaluation process was also agreed upon. The students wished to be graded on attendance and participation in their small groups and on the quantity, but not the quality, of work they handed in to the teacher. In addition, they agreed to write two paragraphs answering the questions: 1) Is this experiment in self responsibility working for you?; and 2) How can we make it better?

Most students were satisfied with the work accomplished and the monthly grades they had received for the first two months of democratic learning. Nevertheless, as the end of the semester approached, panic mounted about passing the departmental reading test. The individuals who had not been sufficiently self disciplined to read as much as they thought advisable, asked for help. I located a published booklet containing readings and practice tests from previous semesters and explained how we might use it in the class. The students decided this type of practice was precisely what was needed, so everyone purchased a booklet, and the course converted to a traditional English class. One reading and practice test were assigned for homework before every class meeting. During the class period, difficult vocabulary and confusing grammar were discussed, and test questions and answers were reviewed.

For the final evaluation, these self directed learners sat for the same departmental reading exam and in-class composition that was required of all students in the seven sections of the same course. In what was considered nothing short of a miracle by the teachers of the other sections who were familiar with the maverick class, the average and range of grades were similar to some sections, and even better than others.

The greatest success, from my point of view, however, was the new realization among the teachers that the teaching-learning relationship need not be top down or "teacher has the power" for significant learning to occur. They were astonished by the results of this experiment in democracy. Also persuaded that academic reading can be improved through oral and aural skills practice of the students' choice, a curriculum committee revised the syllabus for the following semester, deleting one of the two term papers and replacing it with a play reading and a two weeks of listening practice with popular songs.

This rather lengthy tale of democracy in practice will conclude by sharing some comments made on the final evaluation compositions for the course. It must be acknowledged, obviously, that students' comments might have been somewhat influenced by the imminence of final grades. A comment made by Gloria, who seldom spoke during the first month of the course, was: "Before anything, I want to congratulate you for the excellent way of teaching the English class. I think that this is the best class that I have taken in my life. First, it was the funniest class and second, it was the class in which I learned so much. I feel that in this class, I worked more than the others and this is principally because my interest in English is now higher than at other times."

Another note by Tere, who also never spoke until the second month during a discussion about homosexuality: "At first, I was very nervous because of all of the journals and work that I had to write and to read. Now, I have a lot of problems in English, but I feel that I can understand so much better than before, and the best is I can speak without fear to my bad pronunciation. Elena, thanks because of motivation. This is the first English course where I want to learn English."

Elsa wrote this: "I think this course has been a good experience for me. I have learned to study by myself and not because someone, 'my teacher' has to push me to do it. It is very nice to do our own schedule of work because if you do the things you like to do, you will work a lot better."

The private university where this experiment occurred is not especially typical of Mexico. Neither was the group of students typical of an English as a foreign language class, at least not in its heterogeneity of skills. However, the energy and enthusiasm of these students in control of their own learning can be an inspiration to educators in any setting.

It is my wish that this brief paper has encouraged reflection of the educator's role, in particular that of the university language teacher. As the world continues to be increasingly enthralled with technological invention, and as the information explosion renders it impossible to learn new information as fast as it is being generated, the imperative for autonomous learning grows. Even more important, however, I feel that educators must not confine teaching to content matter for social reasons. We must acknowledge that we are guiding human beings in their development in a vastly changing world. Making decisions about learning and social needs, working collaboratively with other people, and assuming responsibility for results are far more valuable than simply gaining competence in a particular subject matter.

Cicero once said, "That man will be eloquent who speaks in such a way that he makes his point, gives pleasure, and also persuades." Never claiming to be eloquent, I would, however, hope that these three goals have been met today. My point is that guiding people in the making of their own learning choices and in working collectively with others to make the learning happen is a higher order of teaching than simply providing information and testing whether that knowledge has been absorbed. It is of a higher order not simply because the information is learned more efficiently, because it may not be, but because the ability to seek out knowledge is in itself far more essential.

If you have been pleased in the process of listening to my ideas, I too am pleased. However, more important to me is whether you have been persuaded that my point has merit. If we in this country hope, as it is written in the preamble to the constitution, "to secure the blessings of liberty to ourselves and our posterity," we and those we teach must be permitted the opportunity to experience liberty, liberty of thought and liberty to choose what to think, if we are to attempt to secure it.

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A TEAM LEARNING APPROACH TO THE INTRODUCTORY JOURNALISM CLASS

Steve Wiegenstein

While collaborative learning approaches are fairly common to writing classes in composition and exposition, they are little used in another common college writing course -- introductory newswriting. A three-year case study in the use of a team approach to introductory journalism in a small-college setting is described, with discussion of its advantages and drawbacks. Some implications for other settings are suggested.

Among the many innovative and nontraditional approaches to education that have appeared in recent decades, perhaps one of the most popular (and most promising) has been that of collaborative learning. A far cry from the "group work" of past years, contemporary collaborative learning approaches involve more than simply putting students in groups to work on projects; many collaborative-learning classes involve students in the designing of syllabi, evaluation of work, and leading of discussion. Research into collaborative learning has been extensive and generally rewarding (Slavin 1990).

Considerable effort has been expended in this teaching method in the area of writing instruction. Many educators followed Peter Elbow's influential work on the teaching of writing, considering the establishment of a student-centered classroom, of which one feature was often the writing group, to have important humanistic and liberating value as well as pedagogical usefulness. Others connect the cooperative learning approach with workplace structures, arguing that the creation and presentation of projects in groups more nearly reflects the situations that students will encounter after they have left the educational institution (Rosen 1988). The overall research consensus is that collaborative and experiential approaches work well in the teaching of writing.

One area that has received little interest, however, is the somewhat different type of writing instruction that takes place in departments of communication and

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schools of journalism across the country -- the teaching of newswriting. Only one article has yet appeared in the educational literature dealing with the use of collaborative approaches in the newswriting classes, despite the fact that virtually every college in the country offers a basic journalism class; and that article was a tentative report on a one-semester study (Lipschultz 1990). The field, then, seems ripe for investigation.

The following is a case-study account of the author's use of collaborative learning approaches in an introductory newswriting class, a three-year experiment that has evolved into a standard teaching practice. The background, methods, and results of the investigation will be discussed in turn, with some final comments about applicability, advantages, and drawbacks.

Background

The author is a product of a traditionally structured journalism school and its newswriting courses. Those courses are typically organized as follows: one semester is spent in a laboratory situation, writing news stories from fact sheets, films, mock interviews, and other such controlled situations. Reporting on actual events comes in the following semesters and from volunteer non-credit work on student newspapers and the like. For two years the author used that structure, but found that it suffered from a number of disadvantages. First, what works in the university journalism school setting does not always apply to smaller colleges, where the journalism program is often part of an English or communication department. Students in a small college tend to be less certain about the pursuit of journalism; many of the students are not particularly interested in journalism and sign up for the course to improve their writing skills or to become acquainted with the field. At the university level, on the other hand, students in the introductory newswriting class are typically at the junior level and have been admitted to a journalism school; motivation, interest level, and prior knowledge are correspondingly higher.

The second difficulty with the traditional program is that it requires several semesters to complete. Smaller colleges tend to have two or three semesters' worth of newswriting courses, with a considerable dropoff in numbers after the first semester as students move on to emphases in public relations, writing, broadcasting, and other majors. The introductory newswriting course is thus the only exposure that many students receive to the journalistic process, and a purely laboratory emphasis gives those students a distorted picture of that process. Third, the traditional newswriting course often performs a screening or testing function within a journalism school, weeding out those students whose staying power or skills are lacking. As a result, such a course can sometimes overemphasize severe criticism of students' work by the instructor, an approach which is contrary to the stated ethos of many small colleges.

Therefore, the teaching situation in the small-college introductory journalism class called for a new approach. After a cursory review of the literature on teaching methods and some informal information-gathering among colleagues, the author instituted the following approach, which has been in place with minor modifications for six semesters.

Method

On the first day of class, students are given a map of the campus divided into four or five areas (depending upon the enrollment in class that semester). They are asked to examine the map and choose the area they would most like to report on during the semester. The sections are drawn so that each area has a considerable potential for news: athletics in one area, administration in another, student government and services in another, residence halls in the fourth. The students are also asked to select a second and third choice area (see Appendix 1).

Immediately afterward, the instructor sorts through the area choices and assigns students to teams. The first criterion for selection is approximate numerical equality; in a class of twenty, four groups of five is the ideal. If the class numbers are twenty-five or more, a five-area map is used in order to keep teams at four to six members each. The second criterion is maximizing the number of students who receive their first choice. Usually, more than three-fourths of the class receive their first choice; in the three years that this system has been in operation, no student has yet had to take third choice. A final criterion of selection is group heterogeneity; all other criteria being met, assignments are made to mix women and men, underclass and upperclass, on each team.

During the second class day, team assignments are given to the students. The students divide into their teams and spend the early part of the hour exchanging names and phone numbers and getting to know one another. Then the instructor meets with each team and explains what is expected of it.

The class expectations are these: each team is to cover its area just as a reporter covers a beat. The first step for the team will be to develop a roster of potential news sources and an area stylesheet. After that, the team will report on events from that area, assigning stories to each member as it sees fit. The team is required to turn in a minimum number of news stories each week (depending on the number of members; the usual number is two). Each Friday is reserved as team meeting day; during the class period, team members proofread each other's articles, discuss coming events in their area, and agree upon assignments for the following week. The instructor meets with each team to collect assignments and discuss the team's progress.

During the semester, then, two days a week are taught in a more traditional style, while one day a week is reserved for teams. Students are not given direct assignments by the instructor, although during the weekly meetings the instructor frequently makes suggestions or warns students away from ideas that sound unpromising. Nor does the instructor set due dates for stories; all that is required is that the team come up with its necessary minimum.

Grading performs both a carrot and a stick function in this system. To prevent a good student's grade from suffering if he or she is part of a poor team, news stories are graded individually. However, teams are placed in competition for bonus points; the team that does the best job of covering its area (judged at the end of the semester by examination of the team's portfolio) receives thirty bonus points for each member, out of a total number of approximately 750 for the semester. The members of the second-best team each receive fifteen bonus points. If a team fails to turn in its minimum stories some week, on the other hand, each member of the team (not just the team member responsible for the failure) loses ten points. In both instances, the purpose of attaching point value to team performance is to foster a sense of mutual responsibility and cooperation within the team. Team members are encouraged to take seriously their responsibility to help out their teammates; typically, teams meet informally before and after each class to make sure each member's work is on schedule. Team members who do sloppy work or who threaten to miss a deadline are subject to the intense scrutiny of their fellow members, and team members whose skills are not up to the others often receive extra peer help.

The Friday team meetings give the instructor the opportunity to discuss news events on a much more realistic basis than is possible with laboratory assignments. On weeks when the team is short of ideas for news stories, the instructor brainstorms with the team. Periodically, the team's overall performance is discussed, with the help of a checksheet that is updated weekly (see Appendix 2). Since all members of the team have seen each other's work (though not the grades received for that work, which are kept private), students have a large number of models available to them for comparison and are able to borrow ideas and techniques that they have seen others use. On some weeks, the team is overwhelmed with news to cover; on other weeks, the team has to scour its area for stories. Both situations provide excellent analogies to actual working conditions.

Parity among students' workloads is maintained by requirements on the total number of stories and the type of stories each individual must complete by the end of the semester. Each student is required to cover a speech; to rewrite a news release; to cover two news events; to cover a meeting; to write a personality profile; and to write an investigative/interpretive feature. The instructor reserves the privilege, just as an editor would, of rejecting a poorly done story or requiring a rewrite. Students who wish to rewrite stories that are not timely may do so; many personality profiles go through one or more rewrites as a result. Timely stories, on the other hand, are treated as they would be if the students were working for an actual newspaper -- there is only one chance to do it right. Students who finish their required minimum early and want to continue to help their team are permitted to turn in extra stories; those stories are graded, and if their grade is higher than the student's previous grade in that category (a second speech story, for example), the higher grade replaces the earlier one.

Results

The team approach to the introductory journalism class can be considered a success from almost every point of view. Its advantages over a more traditional approach can be seen from both the student's and the instructor's perspective.

From the student's chair the team approach offers several advantages. Students are able to select the area they will cover based on their own interests. To ensure that students become good general reporters, however, the areas are drawn so that no team can report on only one topic; for example, the area of campus that includes the athletic department also includes the business school, the architecture school, the maintenance department, a residence hall and the theater department. Team members have to develop good general reporting abilities if they hope to cover their area properly.

Another advantage to the student is that the team does its own story assignment and deadline-setting. Students express considerable satisfaction that they can choose what to write about, who is to write the story, and how long it should take. This structure fosters a considerable feeling of empowerment among students, leading to more concern for the quality of their (and their teammates') work. Overall course attendance and interest increases, and class morale is noticeably good.

From the instructor's perspective, the advantages are even more noticeable. Under a laboratory system, all the students in a class wrote about the same subject at the same time (and usually for semester after semester). While this permits some standardization of performance evaluation, since all the stories can be compared against some ideal standard, it also leads to a sense that the class has little to do with the actual practice of journalism and prevents the instructor from confronting students with real-world opportunities and dilemmas. If the instructor modifies the laboratory system so that actual on- or off-campus assignments are made, the instructor is faced with the daunting task of coming up with twenty to thirty newswriting assignments seven or more times a semester. The instructor must then calculate an appropriate deadline for each assignment and must deal individually with each potential missing of the deadline. Therefore, one advantage of a team system is that students are doing most of the work of locating and assigning news stories.

Having the students perform this task leads to the second instructional advantage of the team system, its closer mapping to the actual practice of journalism. Even the greenest reporter is expected to come up with ideas, to develop a network of sources, and to gain a realistic understanding of deadlines; no reporting experience resembles the typical introductory newswriting class, which all too often develops passivity on the part of students as they wait for all guidance and instruction to come from their teacher. With the team method, the responsibility for knowing what is going on around campus is squarely on the shoulders of the student. This responsibility, however, is not seen as a burden, but as an individual choice; after a few weeks students begin to pride themselves on their status as the eyes and ears of a certain area of campus. With this status comes a stronger sense of enterprise and an increased ability to locate potential news stories.

A third advantage for the teacher is improved classroom atmosphere. Under a traditional system, with the instructor as the locus of all authority -- assignments, deadlines, grades, comments -- the introductory journalism class is all too similar to every other lecture class on the college campus. Students are tempted to find shortcuts around assignments, to try to extend deadlines, to grumble about comments and grades, and all the other symptoms of the ordinary college classroom. With a team learning approach, assignments and deadlines are the responsibility of the team, so that students feel no onus of authority, even though they wind up doing the same amount of work. Each story has been subjected to evaluation, criticism, suggestions for improvement, and line editing by fellow team members before it is turned in, resulting in two things: the work is generally of a higher quality, and students become more accustomed to having their work scrutinized. The second of these results is as significant as the first, for not only does it help the student develop the necessary professional detachment from his or her work, it also accustoms the student to the kind of close scrutiny characteristic of the professional world.

No change is without its drawbacks, however. A shift to a team learning approach has its price. Perhaps most immediately felt is the alteration in teaching style necessitated by the change. Since in the team meetings the teacher needs to allow students to make their own decisions as much as possible (ideally the students should make all their own decisions), the instructor must develop habits of restraint, deferral, silence, and listening as opposed to the usual teaching habits of involvement, leadership, free comment, and lecturing. At the same time, the instructor must be able to reassume those traits when appropriate, such as during the other class days when the focus is on presentation of material and when a group is clearly making some wrong decisions. In other words, the instructor must be prepared to shift roles frequently and must be willing for the class never to settle into the calm flow of a more predictable instructional method.

A second drawback is the reduction in the amount of material that can be presented, the result of the loss of lecture time. Since an introductory journalism class is far more skill-oriented than content-oriented, however, this drawback is far less serious than one might imagine. The skills of reporting and writing are learned more effectively through actual experience than through canned exercises. A number of exercises and quizzes are still employed in this class, especially over stylebook material.

Another minor drawback is the fact that some students may receive a higher grade than their individual work deserves simply by virtue of being the poorest or laziest member of a good team. This problem can be alleviated by making the number of bonus points just large enough that students whose work is on a grade borderline will enjoy the benefits, but not large enough to result in a universal grade increase. In addition, frequent in-class writing assignments, exercises, and quizzes keep the evaluation of a student's work from becoming purely a team outcome and minimize the amount of undeserved benefit from the good work of others.

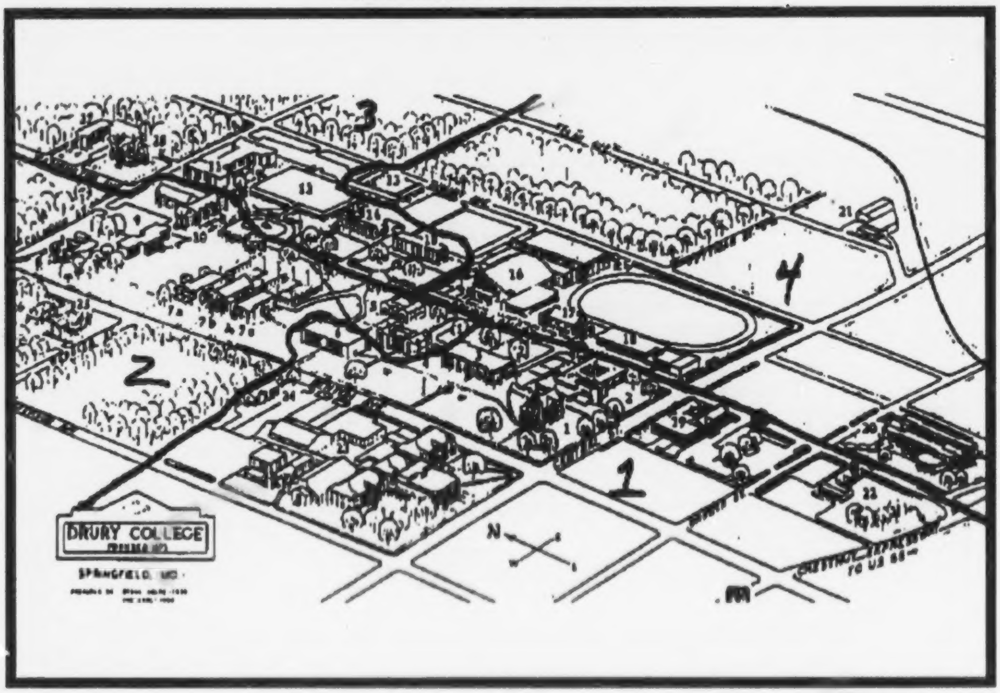
Finally, the instructor must come to grips with the fact that students will sometimes make poor choices of story assignments, give themselves unrealistic deadlines, and spend time pursuing marginal news stories. The temptation will be great to intervene in team meetings, to become the de facto leader of each team, in order to save students from themselves or merely to make their experiences more likely to succeed. Nevertheless, failure is often as instructive as success. A student who has optimistically planned to meet a one-day deadline on a long feature story, only to find that her subject is unavailable or that the interview will take longer to write up than she imagined, is gaining an important lesson in the practicalities of journalism. The instructor must take the long view, and must avoid manipulating the groups for short-term benefits that will result in the same kind of loss of initiative and enterprise that characterizes the traditional structure.

Implications

This approach has been used on a small college campus, where the instructor taught the only section of the journalism class and was thus able to divide the entire campus into coverage areas without running the risk of having several students trying to cover the same event. On a larger campus or a campus with multiple sections of the journalism class, some logistical difficulties might ensue; but a larger campus could also be expected to have more news to cover and therefore to be able to accommodate a division into more coverage areas. The attitude toward beginning newswriting students implied in this approach is perhaps the most important change. Ultimately, what is different about a team learning approach is not what is taught -- the skills and body of information are the same -- but rather the idea of what is important to learn. With a conventional approach, the author felt confident that he was producing students who were highly trained in the craft of journalism; with a team learning approach, the students who emerge from the class are still trained in the craft, but more importantly, they understand how and why journalism happens. They learn how news decisions are made, what opportunities and obstacles there are for the journalist, and consequently may become better consumers of journalism as well as better future journalists.

Appendix 1

Coverage Area Map For Introduction to Journalism



1	Stone Chapel
2	Walker Library
3	Burnham Hall
4	Pearson Hall
5	Harwood Hall
6	Lay Science Bld
7	Mabee Center/ Performing Arts
7a	O'Bannon Hall
7b	Clara Thompson Hall
7c	Lydy Hall
8	President's House
9	Sunderland Hall
10	Wallace Hall
11	Smith Hall
12	Findlay Student Center
13	Panhellenic Bld
14	Belle Hall
15	Turner Hall
16	Weiser Gym/ Hutchen's HPER
17	South Gym and CX
18	Breech Building
19	Communication Center
20	Hammons School of Architecture
21	Maintenance
22	Washington Ave Baptist Church
23	Central High School
24	Lambda Chi House
25	Sigma Nu House
26	Sigma Pi House
27	Kappa Alpha House
28	Bentley House Museum

Appendix 2

Story Chart for Introduction to Journalism, Shortly Before Midterm. Stories are Entered by Slug and by Date Turned In.

Area 1	Speech	News I	News II	Multi-source	Profile	Interpretive
Fowler		Jennings 2/7				
Moore		Czecho 2/28	Habitat 2/20		Flikkema 1/31	
Denman		Regents 2/7	Commfest 2/14		Bynum 3/6	
Brown		Roy award 1/31	Chaplain 2/7	Finaid 3/27	Meyer 2/21	
Area 2 Allen	Convo 3/20	Exhibit 1/31	Smith Hall 2/21		Willis 2/27	[illegible] 2/28
Bullock	Richardson 2/14	Ambassadors 2/7	Sigma Pi 2/28		Kennon 2/27	
Crandall	Comstock 1/31					
Dill		Singers 2/14	Singers 3/6		Julian 3/20	
Rountree	Nelson 2/7	Exhibit 2/21	Graphics 2/20			
Area 3 Aton	Date rape 2/21	Internships 2/7		Chili 2/28	Eddings 3/27	
Chandiyen	Habitat 2/21	Greek 1/31				
Myerkord		pre-law 1/31	auction 2/31	Wolf 2/28	Tony T 3/23	
Miller	Shaw/Taft 3/27	Commons 2/14	SUB 2/28	Senate 3/6		
Vincel		Turner 2/28	Seminar 3/6			
Area 4 Bales	Williams/Baker 2/21 2/28	Sorori. Frat 2/7	Homecoming 2/14		Winsig 3/6	
Eveland	Leatherbarrow 2/7	Barron 2/21	Evangel 2/28			
Rushing	Poverty 2/21	Evangel game 1/31	Soccer 2/7		Vithrup 3/6	
Vaughn		Halftime 2/28				
Wilson	Comstock 1/31	[illegible] meet 1/31	Columbia game 2/7		Sobolewski 2/21	

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DEFINING WAYS OF KNOWING

INTUITION: A WAY OF KNOWING - KEY TO UNDERSTANDING DIVERSITY

Margaret Blanchard

Because intuition, the simultaneous realization of wholeness, connects multiple realities, intuitive process and intuitive language are key to interdisciplinary studies. I believe that intuition should be one of the primary skills developed as a foundation for non-traditional and interdisciplinary programs.

> Albert Einstein: "To these elementary laws there leads no logical path, but only intuition, supported by being sympathetically in touch with experience."

I surprised myself in my proposal for this conference by suggesting that intuition be taught, along with critical thinking, as an essential tool for non-traditional education. Perhaps I was giddy at the novel prospect of a sympathetic academic audience. Later I had to smile at the incongruity of intuition wearing the uniform of a required course.

Because intuition thrives on making connections between multiple realities, intuitive process and intuitive language are crucial to interdisciplinary studies. But how can we integrate them more explicitly into the core of those studies without squeezing the life out of them? Some would claim that intuition is so idiosyncratic it cannot be taught--which may be true if we define teaching in a traditional sense, with its emphasis on control, discipline and content. But I know from the experience of teaching three different university classes and numerous workshops that intuitive language and process can be learned, even while the event of intuition remains mysterious and unpredictable. Intuitive language springs forth in children like a bean plant, and even in repressed adults, after some careful mining, it can emerge like a vein of precious ore.

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I define intuition as simultaneous realization of wholeness, a kind of insight which connects both internal and external ways of knowing, giving us "everything at once," if only for a moment. "Wholeness" here does not refer to a product of abstract generalization but to an apprehension of the energy, animating spirit, or dynamism of an experience. This insight usually finds form in an image or symbol and often plays out its dynamic dimension through a story.

My conviction that intuition must be given an honored place in our programs grows more urgent with the increasing cuts in funding for everything which is considered peripheral in education--the arts, creativity, experiential learning. Before the slashed margins completely fall off the edges, I feel compelled to argue that intuition and its companions, creative and experiential learning, are, in fact, not only central to human development but at the heart of our ability to understand and appreciate the diversification of cultures which is currently transforming our society. While argument is neither the intuitive way nor one of my strong suits, it feels dangerous to protect the hidden treasure of intuitive process when intuition holds such valuable resources for leading us along interdisciplinary and multicultural paths of inquiry, both more deeply into our own experience and out into the wider social context.

Because intuition is rooted in personal experience, it respects individual and cultural identity and diversity and makes room for every experience. It also allows an organic growth of a student's exploration of a key question, issue, problem or theme across disciplinary boundaries and provides a symbolic language by which expanding insights can be expressed.

Without regard to categories, the intuitive process encourages each person to drop into a unique personal experience, sometimes through empathy or identification with another, to center in that experience, view it from all sides, get in touch with the unifying energy of that experience, find an image to express that dynamism, tell the story which grows out of that image, and allow that story to expand in meaning and in the context of other stories, including the larger cultural context of stories and myths from diverse roots.

One of the most persuasive arguments for the value of teaching intuition comes from studies of the human brain. While research on the hemispheres of the brain has provided a foundation for a kind of separate but equal argument for inclusion of right brain activities in our curricula, research on the evolution of the brain offers an even stronger case for integration of intuitive processes into our educational system.

Paul MacLean's work on the most evolved part of the brain, the frontal lobe, or the prefrontal cortex, parallels what I define as intuition. In his study of the Triune Brain, MacLean calls this the "angelic brain." He claims it evolved to counter the "ruthlessness" and disregard for species preservation of the neocortex or "rational" brain.

According to MacLean, the neocortex or rational brain is characterized in its functioning by its reliance on external cues, "psychic numbing," neutrality, abstraction, reliance on technical, clinical terminology, its not being tuned to the needs of others or of the whole species, its favoring a binary or dualistic approach, using polarization, plus and minusing, pros and cons, either/ors (Coulter, 202).

The working of the "newer" part of the brain (frontal lobe, prefrontal cortex or angelic brain) is characterized by empathy, altruism, foresight, ability to grasp the prevailing pattern, and it is very strongly linked to the limbic system or emotional channel of the brain (perhaps even bypassing the "rational" brain). It gives us an awareness of a "universal connectedness to all life" (213), doesn't use a sequential or temporal reasoning strategy but a spatial one which allows several pieces of information to be contemplated at once (how each affects the others; the "whole picture"); it works with multi-variables, probabilities and possibilities (which requires imagination), data on a continuum (not a set of discrete, clear-cut units): what I would call waves, rather than particles.

The frontal lobe has no direct motor connection to speech but conducts "inner speech" (a way of storing and integrating complex ideas) and has great facility with non-linguistic codes, patterns (and I would guess symbol systems). So to express the intuitive pattern in discursive language (as we must to some extent even when using narrative) we then must go through the "rational" part of the brain.

Although this new brain research is still exploratory, I find it tends to confirm more ancient systems, like the Hindu or Chinese, for explaining the role of intuition. One more modern connection I make is with Susanne Langer's distinction between genius and talent: "Talent is special ability to express what you can conceive, but genius is the power of conception" (*Feeling and Form*, 408).

Talent therefore requires some native ability and some privileged training (art schools, special classes) whereas everyone is potentially a genius because almost everyone has a frontal lobe, wherein resides intuition, the power to conceive, and to give birth to a realization of a whole reality, whether the connections are within us, between us, or outside us. Maybe we have the talent to express these conceptions, or maybe they are locked up in "inner speech," but regardless of our talents, we share this holistic vision.

As MacLean suggests, this faculty is so crucial to our survival as a species, to resolving issues about the environment, gender equality, economic justice, and racial and ethnic diversity that we must not neglect it in our schools. We can no longer afford to be intimidated by the supposedly more correct, more "rational" analysis, linear logic, or instrumental thinking.

An Experience of Intuition

Before talking any further about intuition, I invite you to experience it. Whether or not you believe you are intuitive, you will discover, I hope, that this experience is more a reminder than a revelation: on some level you probably already know what intuition is. All you need do now to make that discovery is relax, close your eyes, and allow something to happen rather than willing it to happen. As you close your eyes, try focusing inward, keeping in mind the blind prophet who sees all or the wise sybil in the darkness of the underground cavern.

First bring your awareness to your left foot. Feel how it feels: pressure, tension, temperature, and so on. Then follow this awareness up into the rest of your body until you have scanned all parts of your physical self.

Now bring your focus back to your left foot and start erasing that foot, again following that process to erase your whole body. You can imagine holding an actual eraser--blackboard, pencil or art eraser--or you can imagine using a magic wand. If any parts of your body resist erasure, just note which ones and move on to the rest of your body.

Once you have erased your physical self, pause for a moment to feel what is left, what consciousness, what energy. Even without the boundaries of your physical self, you still exist.

Now imagine that consciousness, that energy taking another form. This can be any form--a bird, a cat, a rock, a tree, a cloud, a galaxy. Allow images to shift through your head until you find one that fits who you are and how you feel right now.

After you have found and experienced this new form, return your consciousness to your bodily form and describe briefly how you experienced this exercise: what parts of your body resisted erasure (parts which perhaps need some special attention to ease their tension or parts with which you are most identified), how it felt to be "without" physical form, what new form or forms your energy chose to take. (If there are more than one of you, you might want to share your experience with the others.)

Now what is intuitive about the experience you had once you erased your body?

1. First it relied on an image--the form your energy took in your imagination--a metaphor which allowed an expansion of meaning beyond your own self-definition, in this instance the boundary of your physical self.

2. Second, it had a spontaneous quality: a flash, a leap, a kind of playfulness, perhaps even some surprise. Yet it was actually prepared for by relaxation, in this case a meditation on the body which not only provided the optimum condition for intuition but also allowed for a certain distraction, a lack of focus which intuition (in contrast to discursive reasoning) often requires.

3. Third, it was accompanied by a certainty: once you get an image that works, you know you've got it (which is not to say that everyone will get one that works, at least not right away). This confidence is what makes possible that knowing something without knowing why you know it. You know because you have actually experienced it. The image works because it is infused with your own energy, shaped by your own spirit, tuned to how you are actually feeling.

4. Fourth, it had the quality of synthesis, a both/and experience: you were still yourself and yet you could also become the bird or the cloud. This synthesis can be followed by analysis, linear thinking, exploration of meaning without destroying the original identification. Intuition tends to see connections rather than make distinctions: instead of explaining why humans can't fly, intuition imagines how we can, and do, fly. But it's not just an analogy (which is the symbolic at the service of the discursive).

When others use the words "intuit," or "intuition," they may mean psychic perception, subjective knowing, the unconscious, instinct, mysticism, the right side of the brain, imagination, active imagination or a sensitivity to possibilities (which C.G. Jung calls intuition). Although my use of the term shares characteristics with each of these, it is not the same as any of them.

One of the most pervasive misconceptions about intuition is that because it moves from the "Aha" to the process of figuring out the steps 1, 2, 3 of how it reached the insight, then it is irrational--despite the fact that most accounts of discoveries by geniuses from composers (Mozart) to scientists (Einstein) describe a crucial moment in their process, the illumination, as occuring before rather than after they understood how they arrived there.

The "official" rational process in the general understanding of scientific method and "sound reasoning" is to proceed 1, 2, 3, "Aha." Then we have the security of "knowing why" we know something. Whenever people know something but don't know why they know it, they tend to say they "intuited" it.

One reason we assume intuition is irrational is because we cannot describe it very well in discursive language, the "syntax" of what we consider rational. Although we can talk about it, as I am trying to do here, that does not make it happen, nor does it really communicate a specific intuition.

Because it gives us "everything at once," intuition cannot be expressed directly through ordinary speech, discursive language, which is linear, stretched out into parts--it must be symbolic, expressed through the language of art, natural symbolism, or dream symbolism (made conscious) which allows for simultaneity. Some languages like Chinese and Hebrew can express more of this symbolic meaning because the actual letters or tones (like runes) are multi-dimensional or mystical as well as discursive. And even more linear languages like English and Italian in the work of poets can take on holistic reverberations through images, rhymes, puns.

In her explanation of the two uses of language, the "discursive" and the "symbolic," Susanne Langer gives us the key to intuitive language, in which stories follow from images as, in discursive language, statements follow from words. In other words, image expands into narrative, maintaining its wholeness in time. A brief description of what I mean by "image" and by "symbol" might be helpful here. In many instances I use them interchangeably because I view them as two dimensions of a single reality. "Imagery" refers on one level to a concrete expression of sense (not just visual) experience. It also, at the same time, refers to an object of imagination, that tangible experience which can be imagined and upon which imagination depends. When an image, by way of the imagination, becomes "charged," expansive and multi-dimensional in meaning, it is symbolic. A symbol, therefore, is a meaningful image, but never one fixed in meaning as a sign must be.

This unfolding or extension of an image into narrative, this symbolic time "seen" in a moment, not sequentially, is what Virginia Woolf means by the "expanded moment" (an intuitive experience of time which cannot be measured chronologically); what the Tao refers to when it says "A tree as big as a person's embrace springs from a tiny sprout; a journey of a thousand miles starts from where your feet stand" (93); and it is responsibility to this realization of wholeness that is expressed in the Great Law of the Iroquois Confederacy: "In every deliberation we must consider the impact of our decision on the next seven generations."

A realization of wholeness involves not just an expansion in time but also an awareness of all directions, all sides, including top and bottom. Some say we have round heads so that we can think roundly, wholly.

This intuitive awareness requires a different kind of vision than our ordinary eyesight can provide: the Hindus talk about the Third Eye, we talk about "second sight", a reliance on peripheral vision, "eyes in the backs of our heads." Even more tuned to wholeness is the sense and therefore imagery of hearing which need not violate the normal limits of visual focus to perceive the whole round.

But comparisons to sense impressions are only metaphors for what is actually a deeper insight. Intuitive realization occurs not just when the sound is round but when the roundness strikes both ear and mind. Speaking of the way intuitive insight was understood in ancient India, William Mahony describes "the idea that certain types of people possess within themselves a transformative genius or *dhi*. Such a person was characterized generally as *dhira*, meaning 'wise, intelligent, cunning' . . . [or having] 'sacred knowledge' in the sense of 'the ability to see things as they really are.'" Through intuition (*dhiti*) the sages, visionaries and poets could "give an image to--that is, to *imagine*--sacred realities that, for less imaginative people, were invisible. The genius of imagination allowed them to solve cosmic riddles . . . Thus in Vedic India the imagination was understood to be a powerfully generative force and, in a way, divine; for through *dhi* poets, like deities, were capable of transforming the worlds" (Mahony, 71-72).

U Ah Ha

I'd like to close with a story adapted from a Sufi tale by Idries Shaw which could have a number of applications. In this context, of course, we might apply it to traditional and non-traditional education. It could also describe the relation between intuition and discursive reasoning within traditional education.

Once upon a time a very pious dervish (a dervish in the Sufi tradition is a religious, sometimes holy person) was walking along a river bank, concentrating on how he could become even more pious, when he overheard someone chanting the dervish call.

"Oh dear," he said to himself, "what a waste. That person is mispronouncing the syllables. Instead of intoning Ah Ha, he is saying U Ah Ha."

Realizing he had a duty, as a more advanced student, to correct this unfortunate person, who perhaps because of living out in the country had no opportunity for the proper guidance, he rented a boat and rowed to the island in midstream where the sound seemed to come from.

There in a crude hut he found a person dressed as a dervish chanting the phrase U Ah Ha.

"My dear friend," said the first dervish, "I must tell you--since there is merit in giving as well as receiving advice--that you are mispronouncing the chant. This is how you say it: Ah Ha."

"Thank you," said the other dervish humbly.

Full of satisfaction at having done a good deed, the first dervish rowed back toward shore, reflecting on the wisdom that whoever recreated the sacred formula correctly could walk upon the water. He'd never heard of anyone actually doing this, but he had a secret desire to achieve it himself.

At first he heard nothing from the hut but he was sure his lesson had been well taken. Then he heard a faltering U Ah Ha as the second dervish made the same old mistake--giving the first dervish occasion to reflect upon the backwardness of humanity and its persistence in error.

Then suddenly he saw a strange sight. From the island the other dervish was coming toward him, walking on the surface of the water. Amazed, he stopped rowing.

She walked up to him and said, "Friend, I'm sorry to bother you, but I have come out to ask again the correct pronunciation--I'm having trouble remembering it."

--adapted from Idries Shaw (Tales of the Dervishes, 63).

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HIGHER EDUCATION: THE CULTURE OF KNOWING

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It is imperative that higher education understands how the learner "knows." A synthesis of learning theories and a model for genuine learning is presented. The model is built upon an interactive and holistic concept of human behavior. Additionally, implications for teachers and educational institutions are discussed.

Introduction

> Of all forms of mental activity, the most difficult to induce even in the minds of the young, who may be presumed not to have lost their flexibility, is the art of handling the same bundle of data as before, but placing them in a new system of relations with one another by giving them a different framework, all of which virtually means putting on a different kind of thinking-cap for the moment. It is easy to teach anybody a new fact. . .but it needs light from heaven to enable a teacher to break the old framework in which the student has been accustomed to seeing.
>
> --Arthur Koestler

The multifarious critiques and techniques of higher education can lead us to loose sight of the broader picture, to see the trees but not the forest. We argue that this oversight is especially ironic because learning (knowing), whatever else we can

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say about it, involves a reorganization of the perceptual field: We see a pattern, a meaning, differently than how we saw the display before we "knew" it. A fundamental question that we as educators face, then, is the extent to which we empower students with a heightened capacity "to know," a capacity to "understand" and to "understand understanding." What could be more fundamental to education than the process of "knowing," and yet how many of our students graduate annually with little real understanding of what it means to "know?" More seriously, how many professional educators perceive fully that phenomenon labelled "knowing?" The primary purpose of this paper is to address these questions, that is, to address the issue of understanding how we "know" something, with a secondary purpose a refinement in our perception of education as a culture of knowing. This is especially critical for nontraditional education. Understanding the "knowing" dimension has significant implications for the assessment of nontraditional forms of learning.

Critiques of Traditional Learning Theories

Phenomenologists have long criticized traditional definitions of learning as "change in performance due to practice." One important criticism is that traditional learning theorists *infer learning* from performance data--an inference never justified (objectivity claims not withstanding). The point of the critique is not that reliance on performance data must necessarily be wrong; rather, the point is that such an approach can never be complete (e.g., because it is *at least* one step removed from the actual phenomenon of learning).

An important source with which to document dissatisfaction with traditional learning theories is Sigmund Koch. Koch took on psychology's guru of learning theory, Clark Hull, and did such a devastating job that Hull remarked that he (Koch) "understands my theory better than I do." Most recently, however, Koch updated dissident trends in psychology (and cognate fields) with his volume, *A Century of Psychology as Science* (1985). We believe the overall flavor of learning theory assessment can be conveyed by several quotes from contributors to Koch's volume:

> By the middle of the century it had become clear that the classical theories of learning were limited in scope and that the state of our scientific knowledge was pre-Galilean rather than post-Newtonian . . . (Kimble, in Koch, pp. 313-314)
>
> The history of the psychology of learning is a tale of confusions and controversies. It has more often been told in terms of theorists and

> their systems than in terms of the phenomena of learning (Catania, in Koch, p. 322).
>
> In *The Origin of Consciousness in the Breakdown of the Bicameral Mind*, Jaynes (1977) . . . has given us a glimpse of an alternate possibility. Suppose that language evolved primarily through the elaboration of its instructional functions. . . .From this perspective, contemporary human achievements are not merely those of developing and refining language but, perhaps more fundamentally, those of freeing language from its origins in social control (Catania, in Koch, pp. 329-331).
>
> With respect to scientific psychology, the two most important developments in the last thirty years have been the work of Chomsky on transformational linguistics and the work on artificial intelligence, that is, the programming of computers to simulate human achievements. As these two areas have progressed, they have had the effect of nudging aside the behaviorist proscription on psychological theories about internal structures, in particular, innate or genetically programmed structures . . . . [T]he work in artificial intelligence showed that we could find an information-processing system capable of cognitive tasks which was certainly quite independent of neurology and whose achievements were based on design rather than wholly due to learned procedures (Crosson, in Koch, p. 438).
>
> One may accept the empiricist assumption of a real world, or reliable sensory experiences, as one might have it. However, one may simultaneously separate the construction of knowledge systems, or the way one communicates about experience, from the experience itself. Knowledge about . . . life is not to be viewed as a "reflection" of what there is, but as a "transformation" of experience into a linguistic ontology . . . . [F]rom this perspective the constraints on knowledge as a language are not furnished by reality but by social process. (Gergen, in Koch, p. 547)

Although technical dimensions to such arguments are far beyond our scope, some generalizations are quite relevant. First, it is clear that human knowing ("cognition") is far more complex and multi-dimensional than many simplistic theories purporting to describe it. Second, it is clear that language (including metaphor) is inextricably interwoven with knowing; even our "objective" researchers must rely upon linguistic tools (e.g., comparing the mind to a computer, or to an "information processing mechanism"). Third, it is at least possible that a critical dimension regarding what is "wrong" or "lacking" in higher education is that many of us are still bound by the language and metaphors of "pre-Galilean" learning theories, coupled with barriers created by continuing reliance on the "machine" metaphor in our delivery systems (i.e., the institution of higher education).

Genuine Learning: An Alternative View

The need for a theory that recognized perceptual dimensions to knowing (learning) was actually recognized over fifty years ago. Donald Adams, echoing the work of classic Gestalt psychologists, argued that although "it is not at first glance [obvious] that *all* learning consists in the reorganization of a field, . . . it is possible . . . to show that the 'end-product' of the learning process is a reorganized field, and in many cases to determine the nature of the reorganization" (1931, p. 163). To the extent that Adams is correct, the question for educators becomes something like this: How can we teach so as to promote perceptual reorganizations in students, rather than to promote only rote memorization of disconnected bits of data?

One answer is to set up material, learning exercises, such that students actually experience perceptual reorganization ("insight" or "understanding"). Let us use just such an exercise to understand "understanding." First, turn to the Appendix and try (for five minutes or so) to solve the first riddle on that page (do not look ahead to Riddle 2).

Chances are great that this riddle was quite hard for you to solve, if not impossible. If so, you will no doubt react when we reveal that the answer is quite "simple": the letter "i." Now, with that knowledge in mind, go back and attempt to answer the second riddle of Appendix A. This time, of course, everyone is likely to solve the riddle quickly and easily: the letter "e." Note that you have *never seen either* of the riddles before, yet one was virtually "impossible" to solve and the other was "easy" (and the results are the same even when the order of the riddles is reversed). What did you have that allowed you to solve the second riddle so easily that was lacking as you attempted to solve the first?

In technical language, there are a number of terms from which to choose: "adaptive act," "insight," "schema," "cognitive map," and so on. For our purposes the point is not what label to attach; we can say simply that what we had in the second condition is a newly acquired "understanding" of riddles (we may look to the structure of a poem, the letters and words used to compose it, as well as to the linguistic content of the poem in arriving at a solution). In other words, we now know an alternative perspective with which to view riddles; we know something that we did not know before this experience.

In using this little exercise with our students, we challenge them to connect their learning to broader educational concerns by asking the question: Do you think that many of our problems in life, both personal and social, may be analogous here? That is, from our own (uninformed) point of view, the solution seems impossible, but once we gain *understanding* into the problem, via education, then we may readily arrive at a solution (or range of possible solutions!). As we come to understand, the perceptual field is reorganized so that we now "see" what we could not see previously.

A phenomenological psychologist, in attempting to differentiate this view of learning from "conditioning" and "acquisition of information" views, has this to say.

> All [traditional] learning experiments are identical in that once the performance criterion is attained, the inference is made that the subject has learned the material. [After presenting a subject with nonsense syllables, which he successfully recalls,] his performance has attained the criterion and it is inferentially asserted that he has learned the material. . . .Briefly, the assumption is made that the acquisition of information and learning are one and the same. However, this assumption can be challenged by asking if it is valid to maintain that at every occasion in which information is acquired, learning occurs also. Suppose that the material for a learning experiment consists . . . of a single letter, X. After a single trial, the performance of the subject indicates that he is able to flawlessly and unhesitantly recall that material. [Note that] a faithful and direct observation of this performance would assert that the subject acquired a bit of information to the effect that a moment ago the letter X appeared to him on the learning drum, but assuredly not that he learned "X." In other words, all that can be directly observed regarding the performance of the subject is that he demonstrated that he retained in awareness what was perceptually presented to him previously. This becomes evident when the subject is removed from the laboratory, [for example,] looking at the sky on a cloudless night. A meteor flashes by and, just like the letter X on the learning drum, at one instant it is there, at the next it is gone. When the subject is then asked to recall this, he flawlessly and unhesitantly reports that he saw a meteor.

> Concerning this everyday event, two statements can be made. First, the subject acquired a bit of information the effect that a moment ago he saw a meteor; and secondly, and of the utmost importance, he did not at that occasion learn "meteor . . . ."
>
> If the objection is made that . . . [the subject learned] that he saw the letter X and the meteor, then to this objection it can be replied that if the subject's awareness of having seen either the letter X or the meteor is to be termed learning, then the word learning, as inclusive of every moment of perceptual awareness, becomes so general as to be rendered meaningless as a specific and distinctive activity (Colaizzi, in Valle & King, pp. 121-123).

Colaizzi concludes that genuine learning occurs when the learner extracts from perceptual material a new meaning, a new understanding, and/or a new relationship which was not understood prior to the learning experience. An ongoing (never completed) process, genuine learning continually re-structures our perceptual readings of reality. Although there may be many dimensions to such learning, it seems that the following characteristics sketch a general profile of genuine learning (Valle & King, 1978):

- it re-structures our perceptual field, our world views;
- it provides a new perspective, or frame of reference, with which to view reality;
- in involves increasing linguistic/symbolic sensitivity, as the learner struggles to find ways to convey the new insights;
- it is grounded in or connected to human experience;
- it is integrative, as the learner connects new knowledge to prior knowledge, and knowledge garnered in one domain to that gained in another;
- it is often difficult: sometimes the learner must "stay with" material (in momentary confusion) long enough to achieve understanding;
- it is "surprising," because when it does occur one "knows" something that was unexpected and/or that runs counter to "common sense";
- it entails risk: one truly risks discovering something that one does not want to know, and risks discovering that a question is unanswerable (at least for now);
- it is a process of unfolding, one which is never complete; and
- it is exceptionally rare.

Toward a Model for Genuine Learning

Building on the literature previously cited, a model for learning can be developed. First, we may incorporate the triadic metaphor of mind: doing, knowing, and feeling (Figure 1). The doing dimension is performance oriented. It is where initiation and application of learning occurs. The knowing dimension is the analytical processing of the input from the doing dimension. It is an enabling quality composed of *perception* of objects, processes, and consequences in the environment. It provides familiarity with what is perceived and allows for operational decisions in carrying out goal choices. The feeling dimension of the mind is directive: it identifies conditions and phenomena that contribute to satisfaction and ascribes positive or negative personal values. Additionally, it transposes these value loadings into preferences and goals that elicit commitment.

The model is a four-stage cycle based on the holistic nature of human activity. The model is cybernetic, self-correcting, circular, and dialectic. The constant interaction of experience and neurological capacity jointly shapes potential. Learning is sequential and has a definite initiation point. Figure 2 indicates that there are four stages of learning and initiation should begin with real concrete experiences which yield functional familiarity. These life-like experiences produce consequences which can be observed and reflected upon (stage 2). The development of this stage involves perceptual activity. The third stage of learning is symbolic development. It is built on abstraction and facilitates conceptual activity. Stage four is behavioral in nature and emphasizes experimentation and verification of symbolic abstractions. The results of experimentation mediates future real-life experiences.

The model also provides a framework for describing how people learn based on two bi-polar dialectic tensions: real/symbolic and perceptual/behavioral. As growth and development occur an individual expresses different preferences for the bi-polar tensions. The real/symbolic dimension is where cognitive development occurs. It can be described as being dominated by one's immediate experience to assuming a mental set. The perceptual/behavior dimension is the other factor related to cognitive growth and development. It can be described as a continuum that ranges from the manipulation of symbols to overt actions. As growth and development occur our learning becomes more perceptual and we tend to manipulate the symbolic.

The initial role of a teacher, with respect to this learning model, is to engage the learner at stage one (the "real," i.e., a concrete problem, issue, or situation that challenges the learner's current perceptual acuity). This transaction should *disrupt equilibrium* and can be called *the teachable moment*. Therefore, stage one can be engineered by allowing the learner to act upon something which produces an unresolved consequence. The unresolved consequence yields an internal need to know. Without the need to know it is difficult to engage the learner perceptually, symbolically, or behaviorally.

Higher Education as Machine: A Critique

A perceptual approach to learning presupposes that because language is interwoven with knowing, the way we speak about reality mediates how we think about and act toward that reality. Just as an understanding of learning may be bound by our limiting views, so may our understanding of higher education be bound by our language-mediated views. In other words, just as our theories of learning may be inadequate, so may the "delivery system" built upon that intellectual foundation.

In his book, *Images of Organization*, Morgan begins with the most common metaphor used to describe and enact institutions: the organization as machine. Rooted firmly in the context of the industrial management, this view is fairly easy to describe: a hierarchical structure bound by the unity of command principle; specialization of the work according to institutional tasks; a strict line of authority and responsibility, with increasing levels of both as one ascends the organizational chart; standardization of jobs, work procedures and performance evaluations; and primary accountability for success vested in the highest level of the hierarchy. These principles tend to be used most fully in military settings; hence, we speak of an army as a "military machine" or a "fighting machine."

The question for educators is to what extent has higher education organized along machine metaphor lines[1] and is this mode of organization helping or hindering the learning process? Toffler, for instance, argues that education and other social institutions follow a model dictated by economic reality.[2] What we have today, continues Toffler, is an educational institution designed for an industrial age society, but functioning in a society that is no longer industrial in character.

The industrial workplace required individuals who showed up for work, were punctual, were virtually incapable of being bored, followed procedures unquestioningly, and left problems up to the managers (experts) to solve. Hence, the "real" priorities of the educational system are to be attendance (definitely a "failure" if three classes are missed), punctuality, careful attention to procedural rules of the instructor(s), instilling of a perception that learning is not meant to be "fun," and emphasis upon witnessing the problem-solving prowess of instructors (i.e., learning as a spectator rather than a participant sport). In Silberian terms (endnote 1), the image of student as passive consumer of educational product, marketed via the professorial "middle man," is realized in practice.

Our contention is that this image of education, made "real" (socially constructed) by the language we use, is actually one of, if not "the" primary problems with education today. By relying on inadequate learning theories, ones that paint a portrait of the learner as little more than a performing chimp, and then importing these over-simplified theories into an institutional delivery system that models itself along machine lines, what kind of "products" should we expect to find? The real "surprise," it seems, should not be that education is failing at its highest tasks; rather, given its current structure and guiding pedagogical assumptions, the surprise is that we even *expect* to graduate highly motivated, autonomous (self-directed), creative and insightful individuals!

If there is a cure, it is most likely to be found in how we talk about education, because there exist important links between language, perception, thought, and action--difficult though it may be to describe those links. If we are to rely on metaphor, then we contend that conceptualizing education as a "cultural system,"[3] or simply a culture, is much more likely to guide us to accurate perceptions of what we are trying to accomplish than are industrial/machine/consumer metaphors.

"When we talk about culture we are typically referring to the pattern of development reflected in a society's system of knowledge, ideology, values, laws, and day-to-day ritual" (Morgan, p. 112). Unlike the machine metaphor, the concept of culture alerts us to the possibility of symbolic dimensions of organizational reality, to shared interpretive schemes that lend meaning to those sharing the reality, and thus to possible ways of perceiving anew possibilities for organizational action.[4] In fact, by viewing higher education in cultural terms, we come to see that the educational environment is, in large part, an extension of ourselves: As we begin to change ourselves we change our culture, and as our culture changes we change as well.

Perhaps one of the greatest ironies here is that most scholars now acknowledge, at least implicitly, the dynamic nature of knowing as it is manifest in their *own* lives. Why, then, does there exist such a clinging to tradition, to adherence to pedagogical theories characterized by passivity, and to a view of the knowledge delivery system in mechanistic terms? Perhaps that is the question that needs to guide the many other questions about education.

Appendix A

I'm not in earth, nor the sun,
nor the moon.
You may search all the sky--
I'm not there.
In the morning and evening--
though not at noon.
You may plainly perceive me,
for like a balloon,
I am suspended in air.

Though disease may possess me,
and sickness and pain,
I am never in sorrow nor gloom;
Though in wit and wisdom
I equally reign
I am the heart of all sin and have
long lived in vain;
Yet I ne'er shall be found
in the tomb.

Riddle 1

The beginning of eternity,
the end of time and space,

The beginning of very end,
the end of every place.

Riddle 2

Figure 1: Dimensions of the Mind

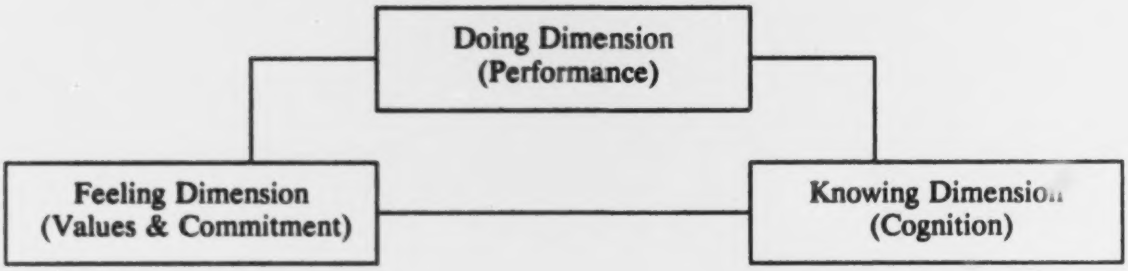
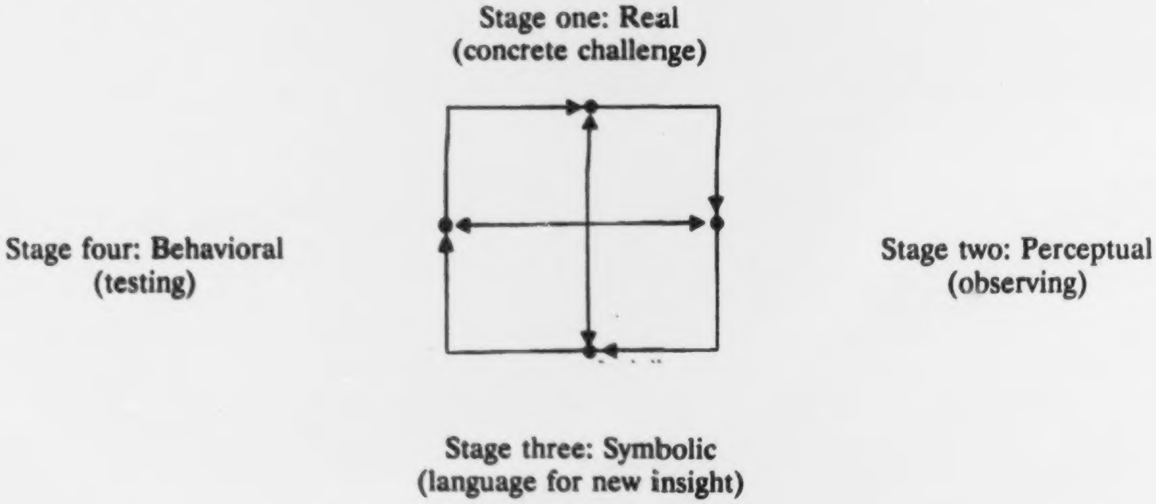

Doing Dimension
(Performance)
Feeling Dimension
(Values & Commitment)
Knowing Dimension
(Cognition)

Figure 2: Learning Model Stages


Stage one: Real
(concrete challenge)
Stage four: Behavioral
(testing)
Stage two: Perceptual
(observing)
Stage three: Symbolic
(language for new insight)

Endnotes

1. Note, e.g., that higher education and the military are the only remaining social institutions that still employ explicitly the language of "rank."

2. Boston University President John Silber, in one of his speeches denouncing student demands for increased participation in governance, stated that education was a "product" and they could purchase it (or not), but as consumer they had no role whatsoever in its "production." (On certain occasions, this belief seemed to extend to faculty as well!)

3. We have in mind here not only Morgan's work on various metaphors to describe institutional realities, but the use of the term by cultural anthropologists as well. In particular, Clifford Geertz's notion of "cultural symbol systems" seems closest to the mark, wherein he speaks of "religion as a cultural system," "science as a cultural system," "morality as a cultural system," and so on (see Geertz, 1973).

4. Consider one of the latest "hot topics" in education: assessment. In many cases, assessment strategies are simply being tacked on to programs doing "business as usual." Considered contextually, however, assessment presupposes other patterns of meaning: the goals and values of the institution, the path of individuals long after they depart, and so on. As one illustration of a broader view of education, therefore, we are also developing a qualitative assessment strategy (see Frost, Pierson & White, this volume).

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THE AGONY OF RECONCILING: REFLECTIONS ON A SUMMER PROGRAM FOR JEWISH/AMERICAN AND EAST/WEST GERMAN UNDERGRADUATE STUDENTS

Björn Krondorfer

In the summers of 1989 and 1991, I had the opportunity to organize and facilitate an innovative program which brought together Jewish/American and German undergraduate students. This paper assesses the value of creating comprehensive educational environments for students of antagonistic cultural backgrounds; these environments, I will argue, provide students with an opportunity for coming to terms with their historic legacies.

Together they looked at family photographs: Grandparents who had escaped the economic hardships and antisemitism of Russia and Galicia; his grandfather in Wehrmacht uniform; her Native American and Irish relatives; her grandmother surrounded by five children ("to have many children," she explained, "was the Nazi ideal of expanding the German race"); her Jewish father and German mother (who are now divorced).

Together they listened to Jewish survivors. An East German student sobs as a survivor mentions the word Appellplatz. It is the place where the SS conducted their endless roll calls. It is also a name for East German schoolyards.

Together they listened to a young Jewish activist who decided to live permanently in Berlin. "How can you live in Germany?", the American Jewish students ask.

Together they saw the plans for the U.S Holocaust Memorial Museum in Washington. Why is America building the largest Holocaust museum in the world?, the German students wonder. "I am afraid, it's becoming a Holocaust-Disneyland," a West German student says. His American peers are upset.

Together they visited the Rashi Synagogue in Worms, the oldest synagogue in Germany, burnt to the ground during Kristallnacht and rebuilt after the war. In the

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adjunct museum, Jewish religious artifacts are displayed. A Jewish student weeps: "I feel as if I am behind the glass." In the evening, she will say: "I could never live in Germany." Her German peers are visibly upset.

Together they went to Auschwitz . . .

These are but a few examples of what took place during two summer programs (August of 1989 and 1991), which brought together American Jews and Christians and East/West German students.[1] These four week long programs, which I facilitated and helped to design,[2] were offered as extra-curriculum activity to undergraduate students who wished to learn about the Holocaust and its effects on post-Shoah generations. The German and American students lived and studied together and traveled to historical and contemporary locations of each community. The first half of the program took place on the Bryn Mawr Campus near Philadelphia (with trips to Washington and New York); the second half in Berlin and Auschwitz.

Twenty students were invited to participate in each of the two programs. They underwent an intense process of understanding the historical, religious, social, and political dimensions of the Holocaust, of addressing those issues as second and third generation post-Holocaust youth, and of finding the tools necessary to build on the past for the future.

The specific challenge of this cross-cultural and inter disciplinary program was to facilitate the antagonistic relationship between Jews and Germans. Dan Diner has called this relation a "negative symbiosis," pointing to a continuing interdependence between these two communities (Diner 1986). The interactions and reactions of the students soon revealed their struggle with a historical legacy which divided them into grand/children of victims and victimizers. Despite the temporal distance of nearly half a century, the Shoah has left its marks on the identity of young Germans and American Jews. This observation might be surprising to some American readers (as it initially surprised many of the students), but during the four-week encounter we discovered that distinct group identities were rooted in culture-bound approaches to remembering the past. Emotional expectations and intellectual responses differed greatly and often impeded the building of relationships.

For example, German students usually do not meet Jews in Germany (only 30,000 Jews live today in Germany) and almost no one knows a Jewish person of their age on a personal basis. Conversely, many of the American students have only a vague understanding of what it means to grow up in modern day Germany. In the summer programs, however, both groups found themselves in a situation where they were asked to share personal thoughts and feelings (as well as meals and bath rooms) and were encouraged to openly discuss Jewish-German, American-German, and Jewish-Christian relations--all issues related to their multiple identities.

If it was relatively easy to acknowledge and rectify a certain lack of information about each culture, it was far more painful to realize that, despite good intentions, understanding did not always happen. The students needed to learn that culturally distinct modes of remembering have led to different, and sometimes incongruous, modes of perception: The same event or site could trigger very disparate responses. At times, the students became deeply frustrated, yet ever willing to pick up the struggle a few hours or days later. At the end of the four-week program, the students had undergone a thorough probing, re-examination, and re-arrangement of their "ethos" and "world views" (cf. Geertz 1973).

The program had to accommodate various needs: It provided information about the historical roots of the Holocaust; exposed students to the realities of contemporary communities; offered sessions coping with emotional stress, anxiety, and anger; encouraged inter-group and intra-group discussions; facilitated conflicts resulting from the day-to-day living situation; and provided opportunities for strengthening relationships. In order to achieve these ambitious goals, the program relied on a wide array of pedagogical methods able to encourage students to enter an intellectually challenging and emotionally disturbing realm. As I will show below, the combination of cognitive, affective, and experiential learning was a necessary requirement for creating such a comprehensive educational environment.

Structure and Methods

To better understand the unfolding of the program, I will briefly outline the structure and methods of the 1991 program.

Divided into seven programmatic units, the program covered a wide range of topics, sites, speakers, debates, and workshops. These units did not always follow a chronological sequence but often overlapped, thus forming an intricate web of interactive, temporal and spatial relations.

Two Weeks: Bryn Mawr, Philadelphia, New York

Unit 1 The Impact of the Shoah on individual and social Biographies

Family and biographical histories; sessions on prejudice; listening to stories of survivors (in US, Germany, and Poland); topics on second and third generation Jews and Germans.

Unit 2 The American-Jewish Context

Jewish community life in Philadelphia; Jewish commitment to American unions; political and social actions of Jewish community (ADL in New York and Shalom Center); historic sites (Liberty Hall, Ellis Island); family weekend with survivors or children of survivors.

Unit 3 Social Justice Context

Jewish-Christian dialogue; religious roots of anti-semitism; racism and civil rights; African-American worship; Israeli perspective and ethical reflections on Shoah.

Five Days: Berlin and Halberstadt

Unit 4 Jewish Life in Berlin and Halberstadt

Jewish community in Berlin; sites of Jewish life and resistance; living in Berlin as Jews today; visit to Jewish quarter and cemetery in medieval town of Halber stadt.

Unit 5 National Socialism and Postwar-Germany

Sites of German resistance and persecution; racism and xenophobia in Germany; restoration and de-nazification; Wannsee-Villa. Four Days: Poland (Auschwitz and Cracow)

Unit 6 The Camps: Auschwitz-Birkenau

Guided and self-guided tours of camps; workshops; talk w/Polish survivor; trip to Cracow. Three Days: Berlin

Unit 7 Evaluation

Evaluation of Auschwitz experience and entire program; workshops, discussions, meditation, etc.

These programmatic units were assisted by six recurrent methodological components, which facilitated learning and understanding on multiple levels of communication.

- Group Sessions: These sessions were facilitated by the two team leaders (the German and American group each had one facilitator), and ranged from theme-oriented discussions to solving groupdynamic problems.

- Open Forum: Daily open forums gave students a chance to share whatever concerns they had. Issues ranged from group internal tensions to thematic debates, sharing dreams and answering logistic questions.

- Student Presentations: Each student had to prepare a 15-minutes presentation in advance. These papers dealt with Holocaust-related topics, and stimulated students to engage in their own research.

- Guest Speakers: Guest speakers (survivors, scholars, political activists, community representatives) were invited as resources for information and as witnesses to historic events and contemporary activities.

- Workshops: Workshops were often led by outside persons in cooperation with the facilitators, and consisted of participatory games, paintings, or group-therapeutic techniques.

- Traveling: The visit to historically or otherwise relevant sites in United States, Germany, and Poland.

The content and methodologies are reflective of the ambitious and interdisciplinary nature of the program. Cognitive and academic interests, for example, were stimulated by scholarly lectures, thematic debates, and selected readings. Experiential and intuitive modes of learning occurred during groupdynamic sessions and workshops. Student presentation, open forums, and exposure to public organizations and guest speakers required active participation. There was a continuous mixing of different levels of learning. In addition, we should not underestimate the effects of time and space, two factors critical to the program's success.

Time was significant in two ways. On the one hand, we experienced time as a going back in history (at stake were memory and remembrance), and on the other as living together for 24 hours a day (at issue were our current experiences). The intensity that emerged from the constant juxtaposition of the historical dimension of the Shoah and the "here-and-now" reality of the American/Jewish/German group marked the month-long experience as "ritual time"--the temporary release from ordinary duties for the sole purpose of intensifying experiences in which transformations and reconciliations could occur.

Space also played a crucial role. Experiencing urban and suburban life in America, attending synagogue services, or seeing New York's skyline was as important as being confronted with the empty Wannsee Villa, the medieval architecture of an East German city, or the ominous camps of Auschwitz. The exposure to both temporal and spatial dimensions created a learning environment which relied on sensual perceptions. Thus, the students were able to discover different ways in which individuals and cultures see and perceive reality. No documentary movie, for example, would be able to relate as powerfully the visceral reaction to Auschwitz as visiting this site with a group consisting of the grand/children of victims and victimizers.

Working toward Reconciliation: A Few Examples

Learning within this comprehensive educational environment was often a struggle, frequently painful, and generally efficacious. The four examples below convey some of the impassioned learning that transpired during this nontraditional program.

1. On the first day of the program, we conducted a session on family histories. We had asked each student to bring photos and other memorabilia to document their family backgrounds. Our goal was to take the visual material as an incentive to share stories of our lives and cultures. The students split into small groups, and explained the photos as they pinned them to a panel. Later, the stories would be repeated to the whole group in an abbreviated version.

Though distinct and unique at first, the photos and stories soon revealed patterns: the American melting pot and immigrant experience; the loss of Jewish relatives in the 1930s and 1940s; Wehrmacht uniforms pointing to the Nazi past; Bar Mitzvahs and confirmations revealing different religious backgrounds. A disturbing pattern emerged as well: The German family histories were full of gaps. Some of the German students did not bring any memorabilia; others censored and withdrew pictures (e.g. the grandfather in uniform); one student refused to even tell a story; and another pinned a drawing to the panel depicting a circle with black holes which, as he explained, represented the gaps in his family history. Nearly all Germans from East and West said, "My parents and grandparents do not talk about it" ("it" referring to the Nazi past, the Holocaust, etc.).

For those familiar with postwar Germany, the reluctance to talk about the past among the older generation does not come as a surprise. Postwar Germany is characterized by a conspiracy of silence, or a "legacy of silence" (Bar-On 1989). Much of the intergenerational distrust in Germany can be contributed to this conspiracy.

At first, many of the American students empathized with their German peers who seemed unable to break through their families' denial. They accepted the excuse that the conspiracy of silence was mainly responsible for their lack of knowledge. But when it became apparent that the gaps would not be closed, the initial sympathy turned into bewilderment and anger. "Did you try to talk to your parents?", the American students asked. "You knew you were going on this program, so why didn't you solicit photos from your grandparents? And what exactly did you tell you parents about this program?"

Had the German students first excused themselves by pointing the finger to their grand/parents, they now found themselves being challenged on that same issue. Eventually, they began examining their own emotional investment in the conspiracy of silence, admitting that they were afraid of the conflicts their questions might cause, and afraid, perhaps, of finding skeletons in their family closets.

As one event among many, the session on family history demonstrated how inter-group dynamics were able to elicit thought processes, questions and responses which intra-group meetings would have ignored. No one in Germany would have challenged the students' ignorance. Herein lies the power of cross-cultural programs.

2. The second example shows that reconciliation across generations and cultures is painful but possible. On the third day into the program, we invited a Polish-Jewish survivor who gave a detailed account of his survival in Blechhammer (a satellite camp of Auschwitz). Recalling the horrors, he repeatedly used short German phrases, mostly commands, including the word Appellplatz (place for roll call). After he finished talking, he and several students cried. We took a pause. When we regathered, an East German woman, still sobbing, said how painful it was to listen to his use of the word Appellplatz, since her school yard in former East Germany was called the same. Unaware of the term's history, she was stunned by how much her life was still tied to her country's past. When the survivor walked over to embrace her, she only reluctantly accepted the comfort. "It is wrong to be comforted by those who were victims of my grandparents' generation," she argued, still in tears. Yet, the Jewish survivor's embrace of a German child of victimizers symbolized both the acknowledgement and defeat of the past: No longer simply

defined as victim, the survivor was able to reach out to the next generation and, by offering comfort, empowered himself and the student.

3. Space, as I mentioned above, is an important factor in cross-cultural educational settings. We visited, for example, the Wannsee Villa and the camps of Auschwitz-Birkenau, two places which occupy different ends on the scale of evil. At the former, the final solution was given its official "blessing;" at the latter, the genocide was implemented and executed. Intellectually, students understood the connection between the two locations: Without the Wannsee Conference no Auschwitz. Yet, as we were reconstructing history through our sensual perceptions, only the camps affected us deeply.

At the Wannsee Villa in Berlin, the students were asked to explore the building on their own, in silence. But other than a beautiful 19th century villa undergoing construction (it opened as an educational center in January of 1992), there was not much to see. We were not able to identify the room in which the one-hour conference had taken place. The evilness of this location simply escaped us, perhaps pointing to the general insight, that it is easier to be repulsed by the actual killer rather than the brains behind the crime.

The full impact of evil did not hit us until we got to Auschwitz. Here, in the camps, there was no escape from the horrors (although there were different ways of resisting its full realization). As I wrote elsewhere (Krondorfer 1991b), to visit Auschwitz with a American/Jewish/German group epitomizes culturally distinct modes of perception, and threatens the identity of both Jewish-Americans and Germans (and, to a lesser degree, Christians). In Auschwitz, the desire of Germans not to be identified as German was at its strongest; but the presence of their Jewish peers made them painfully aware of their national identity. Auschwitz usurped the desire of young Germans to be themselves. Conversely, for Jews, Auschwitz represented the place which had robbed them of their culture, family, and history; but being there with German students made it impossible to condemn "all" Germans. The complexity and agony of reconciliatory work is perhaps most apparent when Jews and Germans of the third generation try to comfort each other in the camp of Birkenau.

4. The last example draws our attention to the effects of active participation. As facilitators, we suggested that the students create a commemorative ritual which would mark our visit of Auschwitz as a special event, and bring us back together as a group. To our surprise, the preparation for this ritual had a contrary effect and reopened a schism between the groups.

As facilitators, we posed three questions in order to prepare the commemoration: Why do you want to create a commemorative ritual? Where do you want it to take place? How should it unfold? Already the first question prompted very different responses. While both Christian and Jewish Americans were able to name precise reasons for why they wanted the commemoration to take place ("marking a special time," "praying for the dead," "remembering for the future," etc.), most of the German students remained evasive and ambiguous, and made the "why" dependent on the "where" and "how." So we moved on to the "where," the ritual location. But the tensions only increased as the group was unable to agree on a place. Though everyone thought of Birkenau to be the appropriate place, there was no consensus on the exact location (the crematory? a women's barrack? the selection ramp?). While the American group adopted a pragmatic approach to resolve the conflict, many of the Germans became annoyed and refused to participate. Unable to agree on the "where," the group fared no better on the "how." It all came to an explosion when two German students walked out of the room.

After almost four hours of debate, the group eventually agreed on a rough structure. At dusk, we went to the selection ramp in Birkenau, placed flowers, stones and candles on the ground, were soaked by cold rain and mercilessly bitten by mosquitos. Our own discomfort intensified the pain and rage we had felt the previous days in the camp. In this sense, the ritual achieved what it was intended to do: To inscribe the pain of this place into our bodies and memories. However, the conflict that emerged in the preparation process for this commemoration remained unresolved. Each side was unwilling to accept the other's point of view. Once again, the students were confronted with culturally diverse expectations. For one, there were different degrees of religiosity: Most Americans were practicing Christians or Jews, and had previous experiences with organizing religious gatherings, while most of the Germans were unaffiliated or (as in the case of some East Germans) entirely unfamiliar with religious expressions. Another reason for the inter-group conflict is linked to the location itself. That the German students were reluctant to organize a commemoration service might be connected to a sense of being threatened in their identity and conflicted about what to commemorate. If it is true that Germans want to escape their "Germanness" in Auschwitz, who and what would be the subject of their remembrance? Would it be the victim or victimizer? Would they identify with the grief and anger of their Jewish friends, or with the denial and silence of their own families? Would the ritual intent be a reconciling with their country's past or with Jews today? (Conversely we might ask, why the American Christian students were not similarly confused about their idenitity in Auschwitz. How did they reconcile their legacy of Christian anti-semitism?)

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What these four examples suggest is that cross-cultural education has the power to question, probe, and re-arrange one's ethos and world view. Intellectual interpretations of history and present reality are as much challenged as emotionally felt values linked to one's personal and cultural identity. Because of the intricate and delicate nature of identity within culture-bound patterns, we need to bring a sensitivity to non-traditional, cross-cultural education which borders on cultural therapy.

Endnotes

1. Though acceptance into the program depended on individual merit (the students underwent a quite rigorous application and interviewing procedure), we aimed at balancing the group. Approximately 2/3 of the American group consisted of Jewish participants (regardless of their religious ties); 1/3 identified as Christian. Afro-American and Native American students were included. More women than men were interested in the program. The German group was more homogeneous in regard to ethnic/religious backgrounds. No Jewish (or, for that matter, Turkish) students applied. Most of the Germans did not identify as active Christians. In the 1989 program, a Dutch student participated; in 1991, half of the Germans came from (former) East Germany. There was an age limitation (18-25 years) but no restriction as regards academic interests.

2. The program was organized by the Interfaith Council on the Holocaust, Philadelphia, and the Evangelische Akademie Berlin, a church-related, adult education center. My co-facilitator of the 1989 program was Jon Schmidt, then an American volunteer working at the Akademie in Berlin. My 1991 co-facilitator was Christian Staffa, a Berlin resident and activist working in adult education.

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RELEVANCE OF "KNOWING THAT" AND "KNOWING HOW" TO THE MAIN PURPOSE OF HIGHER EDUCATION IN THE LIBERAL ARTS

Thomas T. Tominaga

Concerning the main purpose of higher education, the traditional and laissez-faire approaches hold that it is to study and prepare for a chosen profession, except that the former adheres to prescribed courses and credits, while the latter advocates the student's freedom of choice; and the nontraditional approach holds that it is to learn and practice how to live responsibly and creatively. The first two approaches are questionable and the third approach is too demanding and needs revision. These three approaches are discussed in terms of "knowing that" and "knowing how" with some helpful insights from Russell, Nishida, Dewey, and Wang so that the dual purpose of higher education can be viewed in terms of the dynamic unity of knowledge and action.

One crucial interdisciplinary issue in the Liberal Arts is the question of what the main purpose of going to college is in higher education. Admittedly there are several ways of approaching this issue. However, I would like to point out at the outset how the issue can be approached from two familiar perspectives on the one side and from one unfamiliar perspective on the other.

Some of us would endorse the view that the main purpose of going to college is to embark on a course of study that would lead to acquiring the skills and knowledge necessary for getting a high-paying job. In short, according to this view, the main purpose of going to college is to be prepared for a successful career or vocation. This way of looking at the main purpose of going to college has been encouraged, modified, or over-emphasized by two familiar approaches to higher education. One of these can be called the traditional approach, which prescribes certain required courses and total number of credits. The other one can be called the *laissez-faire* approach, which emphasizes each student's freedom to choose and take courses of his or her preference.

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From the perspective of the traditional approach, the main purpose of going to college is to gain an education by taking required and elective courses in General Education including the Humanities, Fine and Performing Arts, Social and Physical Sciences, and by taking required courses for a major and/or minor. This approach seems to be too restrictive and isolated from the various needs and complex problems in everyday life that students are supposed to know about and address.

From the perspective of the *laissez-faire* approach, the main purpose of going to college is to give each student an opportunity to choose and take courses in several areas in which they are interested to develop some kind of expertise when they become qualified professionals. This approach seems to be too arbitrary and potentially counter-productive. For, the student without too much guidance, may end up with little or no well-developed skills and abilities that he or she can apply in his or her endeavors.

From an unfamiliar and non-traditional perspective, the purpose of going to college must include an attempt to learn, teach, understand, discuss, communicate, tolerate, and practice different ways of living, different ways of valuing, different ways of believing, different ways of knowing, different ways of seeing, different ways of using language, different ways of reasoning, different ways of judging, different ways of acting, and different ways of dealing with problematic and challenging situations. At first glance, this multi-faceted approach may seem to be too demanding and difficult to be implemented. However, I believe that this approach or some version of it needs to be made an integral part of the curriculum of higher education. Even on an experimental or tentative basis, such a unifying approach should also be implemented in a manageable, cost-effective, and publicly beneficial manner by an army of dedicated and responsible participants. Such participants should include educators, administrators, legislators, students, staff, parents, relatives, and everyone who is concerned about fulfilling the main purpose of higher education.

When we look more closely at the traditional, *laissez-faire*, and non-traditional approach to the main purpose of higher education, we can see at least one fundamental and significant epistemological difference between the first two and the third. By virtue of their orientation and emphasis, the traditional and *laissez-faire* approaches are expressions of a propositional way of knowing that can be designated as "knowing that" or "knowing what."[1] By contrast the non-traditional approach represents a participatory way of knowing that can be designated as "knowing how," which is the practical application of "knowing that" and "knowing what."

Based on what the British philosopher and logician Bertrand Russell (1872-1970)called "knowledge by description,"[2] we can define "knowing that" or "knowing what" as knowledge that is derived from the description of facts and ideas and with the methods of gathering them.[3] In short, "knowing that" or "knowing what" involves a whole host of data or information described and explained in books, studies, surveys, journals, newspapers, lectures, etc. One example of "knowing that" is the following:

> An 18-year-old college freshman from Samoa has learned from his physics instructor that a great deal of radiation has spread in the Ukraine due to an accident that took place at the Chernobyl nuclear power plant in April 1986.

Unlike "knowing that" or "knowing what," the way of "knowing how" is composed of practical or applied knowledge, which is shown by one's ability to do something or to act in a certain way. Viewed in practical or pragmatic terms, "knowing how" involves learning and demonstrating how to carry out certain tasks and responsibilities, how to perform some teachable and learnable activities, how to act out some creative ways of living and thinking, and how to deal with various kinds of problems and situations. In short, "knowing how" involves the performance of a specific course of action for an intended purpose. One example of "knowing how" is the following:

> After receiving the football from the quarterback, a Washington Redskins running back covered the football with both of his hands crossing over one another, tucked it neatly under his stomach, moved quickly forward behind his big blockers, and was able to gain more than 10 yards.

As I have indicated, the prevailing view has been that the main purpose of going to college is to gain the required knowledge and training for getting a job. This can be achieved by following a program of prescribed requirements approved by the traditional approach or by carrying out a freely chosen program of courses advocated by the *laissez-faire* approach. Both of these approaches seem to be more preoccupied with "knowing that" that little or no serious effort is made to teach, learn, practice, and apply various ways of "knowing how" that are educationally meaningful and fulfilling. Although the required knowledge and training is essential in a competitive job market, it is lopsided and unbalanced to view and carry out the main purpose of higher education in this way. From the non-traditional perspective, the knowledge and training acquired through study and learning under the mode of "knowing that" must be supplemented with various ways of valuing, seeing, reasoning, judging, communicating, and acting, all of which are indicative of the mode of "knowing how."

From a critical standpoint, some would argue that since the main purpose of going to college is to be prepared for a job, this goal can be construed and implemented by emphasizing and separating the mode of "knowing that" from the mode of "knowing how." I agree that "knowing that" can be separated from "knowing how" in the theoretical sense. But I don't agree that the main purpose of going to college is to be prepared for a job. I believe that the main purpose of going to college is twofold. First, it is to gain the knowledge and training necessary for a particular profession under the mode of "knowing that." And second, it is also and more so to learn and practice how to live a creative, responsible, useful, and meaningful life of public service. So if the main purpose of going to college is to be prepared for a job by separating the mode of "knowing that" from the mode of "knowing how," the goals and activities of higher education would be meaningless and irrelevant to more pressing needs, concerns, and problems that should be addressed and resolved. Although the theoretical mode of "knowing that" can be separated from the practical or pragmatic mode of "knowing how," I believe that it is more educationally meaningful and beneficial to keep them together and to unify them into a dynamic whole.

Let us assume that the main purpose of going to college is not only to prepare for a chosen profession by the methodology of "knowing that," but also to learn and practice how to live a creative, responsible, useful, and meaningful life of public service under the guidance of "knowing how." If this is an acceptable assumption of a viable philosophy of higher education, then we cannot afford to create an artificial dichotomy between "knowing that" and "knowing how" or even to contribute to a disharmony or conflict that might arise between them.

In order to eliminate the possibility that "knowing that" and "knowing how" might be at odds and in order to account for an emerging and ongoing dynamic unity between "knowing that" and "knowing how" with respect to the dual purpose of higher education, we need to adopt, modify, and apply some helpful aspects of "knowing how." These can be initially identified as follows: (a) Bertrand Russell's recognition of "knowledge by acquaintance";[4] (b) the world-renowned modern Japanese philosopher, Nishida Kitaro's (1870-1945) emphasis on "action-intuition" or "active intuition";[5] (c) the influential American pragmatic philosopher of education, John Dewey's (1859-1952) nondualistic guideline on knowing by doing;[6] and (d) the doctrine of the unity of knowledge and action advocated by the neo-Confucian philosopher, Wang Yang-ming(1472-1529).[7]

Russell's recognition of knowledge by acquaintance involves a direct and immediate experience of any object, situation, phenomenon, activity, or event that a person is aware of. Such a direct and immediate experience implies that the person is quite familiar with whatever he has been exposed to. However, he doesn't have to describe, or rather he cannot describe the content of his awareness, since the directness and immediacy of his experience wouldn't allow for any interruption or mediation.

In order for both "knowing that" and "knowing how" to be applicable to the dual purpose of higher education, students, educators, administrators, and staff have to have some knowledge by acquaintance of various real life situations, problems, needs, and concerns. In other words, these participants can have a better grasp of "knowing how," along with "knowing that," if they are personally familiar with and sensitive to the real life situations, problems, needs, and concerns that they are supposed to address and resolve. Otherwise, without such personal familiarity and direct experience on the part of educators, administrators, students, and staff, the content of "knowing that" would be only theoretical and abstract and the application of "knowing how" would be superficial and purely mechanical.

If educators, administrators, students, and staff can be moderately acquainted with some real life situations, problems, needs, and concerns, then we are on our way towards a constructive and meaningful application of "knowing how." However, we need, so to speak, a "spark plug" that has no disposition to separate "knowing that" from "knowing how" or to delay the move from "knowing that" to "knowing how." Such a spark plug is provided by Nishida's emphasis on "action-intuition" or "active intuition."

As a mode of knowing, action-intuition or active intuition is a kind of nondiscriminating wisdom[8] that resembles the enlightened mind of a selfless[9] but acting person. Accordingly active intuition has no tendency to dichotomize the knowing enterprise into subject and object. This is because active intuition is fundamentally what Nishida called "pure experience,"[10] which is a present awareness of facts, things, events, and situations as they are.

As pure experience and nondiscriminating wisdom, active intuition is an essential and integral part of both "knowing that" and "knowing how." In order to carry out the dual purpose of higher education with emphasis on a chosen profession and a meaningful life, we need to cultivate and activate our active intuition. In this way the claims of "knowing that" and the applications of "knowing how" can be credited to the enlightened, nondiscriminating, and selfless manner in which educators, administrators, students, and staff would learn to operate in higher education.

Once our educators, administrators, students, and staff have begun to cultivate and activate their active intuition in this manner, we can say that they are exhibiting Dewey's nondualistic guideline in the classroom, at the workplace, in the office, at home, in professional conferences, and elsewhere. By carrying out Dewey's nondualistic guideline in all of these places, we can begin to see that knowing and doing are quite closely related, although knowing something need not be the same as doing something.

Dewey's nondualistic guideline is helpful in clarifying the performative status of knowing as opposed to the spectator theory of knowledge. As implied or expected, the performative status of knowing by doing can be understood in two senses. In the qualified sense, knowing by doing is more akin to the mode of "knowing how" rather than to the mode of "knowing that." But in the unqualified or strong sense, we can only know by doing something if we use the scientific method to guide human intelligence in dealing with what Dewey called problematic situations. Understood in the unqualified or strong sense, knowing by doing implies a moral commitment to improving each problematic situation so that felt needs can be relieved and human life can be made more liveable and enjoyable.

Dewey's nondualistic guideline is also significant in that it introduces a moral dimension into both "knowing that" and "knowing how." Instead of performing the activities associated with "knowing that" and "knowing how" in a value-free manner, our educators, administrators, students, and staff are obligated to fulfill the dual purpose of higher education by improving the quality and liveability of each problematic situation. What Dewey's nondualistic guideline is calling to our attention is the value-bound nature of the teaching and learning involved in carrying out the dual purpose of higher education. Instead of viewing the ideas, concepts, and views disseminated through "knowing that" and "knowing how" as being subjective and inaccessible, they are looked at as socially shared instruments that can be used to alleviate and meliorate problematic life situations.

By insisting on knowing by doing, Dewey in his own way was trying to unify the knowledge gained from "knowing that" with the course of action suggested by "knowing how." This unity of knowledge and action had already been anticipated and advocated by the neo-Confucian philosopher of moral psychology, Wang Yang-ming over 300 years before Dewey. To this effect Wang states his famous doctrine of the dynamic unity of knowledge and action as follows:

> . . . I have said that knowledge is the direction for action and action the effort of knowledge, and that knowledge is the beginning of action and action the completion of knowledge. If this is understood, then when only knowledge is mentioned, action is included, and when only action is mentioned, knowledge is included.[11]

Here we can see that Wang's doctrine of the unity of knowledge and action requires that the act of knowing be identified with the act of doing and the act of doing be identified with the act of knowing. Implied in the unity of knowledge and action is a relation of mutual inclusiveness. That is to say, the act of knowing and the act of doing are mutually inclusive in that the former implies or presupposes the latter and vice versa. To clarify this mutual inclusiveness between knowing and doing, a well-known Chinese philosopher Chung-ying Cheng observes:

> . . . for Wang the very concept of acting depends on the concept of knowing for correct understanding. One can not be said to act if there is no knowledge involved in the actor and if the actor does not know the significance or value of his acting. On the other hand, one will not understand knowing without having the disposition to act or without in fact acting. For Wang conceives knowing as a matter of deep experience and commitment and not as a simple matter of conceptualization.[12]

In order to make Wang's doctrine of the unity of knowledge and action relevant to our discussion of the dual purpose of higher education in the Liberal Arts, we need to pinpoint how the unity in question is related to "knowing that" and "knowing how." Based on what I have said up to now, I believe it is helpful to view "knowing that" as the beginning of knowledge in the theoretical or abstract sense and view "knowing how" as the completion of knowledge in the practical or experiential sense. In this way the possibility of disharmony or conflict between "knowing that" and "knowing how" can be eliminated, since these two modes of knowing are now mutually inclusive. As a result, we can now say with Wang that the dual purpose of going to college within the Liberal Arts involves two mutually inclusive and complementary modes of knowing which are "knowing that" and "knowing how."

To begin with, our educators, administrators, students, and staff can engage in "knowing that" by learning, teaching, discussing, and sharing some useful ideas, concepts, and any information from other disciplines. Doing so is the beginning of the task of acquiring the theoretical or intellectual knowledge necessary for a chosen profession or vocation. In order to complete or complement the knowledge gained through study as an integral part of career preparation, our educators, administrators, students, and staff need to express and demonstrate their life commitments. They can do so by acting and living responsibly, creatively, and effectively through life situations, activities, and projects indicative of their mode of "knowing how."

Endnotes

1. Chung-ying Cheng, "Theory and Practice in Confucianism," *Journal of Chinese Philosophy*, Vol. 1 No. 1 (December 1973), p. 193.

2. Bertrand Russell, *Mysticism and Logic* (Garden City, NY: Doubleday Anchor Books, 1957), pp. 207-210.

3. Cheng, Op. Cit., p. 192.

4. Russell, Op. Cit., pp. 202-206.

5. Nishida Kitaro, *Nothingness and the Religious Worldview*, tr. with an Introduction by David A. Dilworth (Honolulu, HI: University of Hawaii Press, 1987), p. 19 and p. 102.

6. Morton White, Ed., *The Age of Analysis* (New York, NY: New American Library, 1955), pp. 178-179. Reginald F. O'Neill, Ed., *Readings in Epistemology* (New York, NY: Irvington Publishers, Inc., 1979), pp. 201-202, p. 206, p. 208, p. 214, and p. 222.

7. Wing-tsit Chan, *A Source Book in Chinese Philosophy*, tr. by W. Chan (Princeton, NJ: Princeton University Press, 1969), pp. 669-670.

8. Nishida, Op. Cit., p. 102.

9. Ibid., p. 102

10. Kitaro Nishida, *An Inquiry into the Good*, tr. by Masao Abe and Christopher Ives (New Haven, CT and London, England: Yale University Press, 1990), pp. 3-5.

11. Chan, Op. Cit., pp. 669-670.

12. Cheng, Op. Cit., p. 194.

DEVELOPING EFFECTIVE TEACHING TECHNIQUES IN INTERDISCIPLINARY PROGRAMS

THE FRESHMAN SEMINAR:
MAKING CONNECTIONS ACROSS THE DISCIPLINES

Violet Anselmini Allain

A first-year course is frequently offered by colleges and universities to serve as an introduction to higher education for entering students. The format and structure of these courses vary considerably with the most common type of offering being an extended freshman orientation which often includes an introduction to campus resources, review of study skills, career information, and an advising component. James Madison University offers a freshman seminar course which, when compared with its counterparts at other institutions, is quite unique. It is a required seminar which introduces first-year students to the academic community of the university. This paper will describe the Freshman Seminar offered at JMU and compare it with similar offerings at other institutions.

In the 1989-90 academic year, James Madison University initiated its first year of full implementation of the Freshman Seminar. Liberal Studies (LS) 101, the Freshman Seminar, is a three credit interdisciplinary course that is required of all entering students. It is an academic offering and considered the centerpiece of the liberal studies program. Professors who teach the Freshman Seminar are full-time faculty members who represent each of the five colleges of the university and have participated in a qualifying workshop to prepare them to teach the course. The Freshman Seminar is centered around a common reading list that is reviewed and revised each year. LS 101 is administered by the Madison Institute for Interdisciplinary Studies which is located within the Division of Academic Affairs. A faculty committee, the Freshman Seminar Coordinating Committee, is responsible for establishing policies and procedures affecting the Seminar, directing assessment efforts, selecting the Freshman Seminar Reading List, planning workshops and other professional development experiences for faculty, and giving general direction to the Seminar.

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In the fall of 1987 a committee of faculty members and administrators established the following set of eight goals and purposes of the Freshman Seminar.[1]

1. The course is to develop in the students a practical knowledge and understanding of the great traditions of civilization, especially the culture in which they live and work. The weekly programs, readings, discussions, and writing assignments in the course should use as their medium materials which have broadly recognized significance for our civilization and culture. These materials should focus on the universal problems of human existence.

2. The Freshman Seminar is to demonstrate that the work of a scholar, and kindred individuals throughout history, is the struggle to objectify the crucial histories of subjective experience. The Seminar is to demonstrate that knowledge which is to be of enduring value must strive to be integrated and internally consistent and solidly grounded in fact. The Seminar is to demonstrate that the great ideas and works of humanity are the result of individual creative acts of observation, imagination, and hypothesizing. The student must be led to appreciate that human knowledge is dynamic and subject to continuous reevaluation and that our present civilization is the descendant of a long, diverse, and complicated history of development.

3. The course is to use primary sources where ever possible so that students come to understand that ideas have specific sources, usually rooted in individuals, and usually with long historical pedigrees. The course should also explore how historical, social, and geographical contexts have influenced, and continue to influence, the development of ideas.

4. The course is to lead students to an understanding of the interconnectedness of the diverse branches of knowledge by choosing subject matter which will explore the interconnectedness and interdependence of knowledge.

5. The course will explore values and questions of ethics. The course should also foster the development of social conscience and grapple with the conflict which exists between the needs for the public good and the rights of individuals.

6. The students are to be provided with problems which focus thinking on the meaning of their lives and the hopes they have for themselves and the future world they will live in.

7. The Freshman Seminar is to provide diverse and frequent opportunities for the students to develop self-expression in speech and writing.

8. Emphasis will be on opportunities for the student to experience, practice, and learn rational and finely discriminating decision making, accompanied by the development of discipline and persistence.

The above philosophical framework was established for the experimental sections of the Freshman Seminar that were taught to pilot this course. These goals and purposes have remained constant through the development of LS 101 as a required part of the Liberal Studies program. The State Council of Higher Education in Virginia (SCHEV) has supported these efforts of JMU by allocating ten faculty positions for the purpose of staffing the Freshman Seminar and approximately 104 sections of LS 101 are offered each academic year.

The officially stated purpose of the Freshman Seminar is as follows:

> The Freshman Seminar is considered the cornerstone of the Liberal Studies program and its purpose is to promote the academic ethic of lifelong learning and to sharpen the skills of analysis, problem-solving, critical thinking, writing, and informed discussion needed for liberal education. The course will seek to develop a common ground of understanding and values among our students through shared knowledge of great ideas and works. More specifically, the course is intended to introduce students at the beginning of their college careers to some of the significant ideas of civilization; to demonstrate that great ideas are not limited to or by a particular time or place but rather are part of the interconnectedness of culture; to show that great concepts can be expressed in a myriad of forms and genres; and to enhance the students' critical thinking, oral expression, and writing abilities.

The Freshman Seminar Reading List serves as the core for the class. (See Attachment A for the listing of the 1991-92 Freshman Seminar Reading List.) The list of readings has changed every year since the Seminar was implemented, and the 1992-93 reading list includes the following works:

Science and Human Values by Jacob Bronowski
The Odyssey by Homer (translated by Robert Fitzgerald)
Tao Teh Ching by Lao Tzu (translated by John C.H. Wu)
Songs From the Alley by Kathleen Hirsch

The diversity of these works lend themselves to the interdisciplinary emphasis of the Freshman Seminar. For example, it is not unusual for the treatment of Bronowski's *Science and Human Values* to include an integration of historical background, economic considerations, ethical issues, and future consequences. Also, by reading and discussing *Songs From the Alley*, students will frequently come to the recognition cited by Newell, ". . . that the problems now faced by our society transcend the bounds of disciplines, and that their solution requires the breadth of vision and skills of synthesis and integration developed by interdisciplinary liberal education."[2]

The works on the reading list are available for students to purchase during the Freshman Orientation programs held during the summer. Freshman Seminar faculty are free to supplement these readings with anthologies or compiled packets of articles. Faculty who teach the Seminar are required to participate in a qualifying workshop. This workshop includes an introduction to the Freshman Seminar, a treatment of each of the works on the reading list and a description of a number of different teaching strategies. The introduction to the Seminar gives the workshop participants an orientation to the philosophy and general goals of the course. Faculty members who are familiar with the texts from the reading list introduce workshop participants to the historical context, educational significance, structure, and interpretations of the works. In addition, a number of instructional techniques are discussed by faculty members who are veteran Freshman Seminar leaders. These strategies frequently include how to incorporate a variety of writing assignments, out-of-class events, non-print materials, a service-learning component, and the use of the mainframe computer for electronic mail and bulletin boards in the class. Developmental workshops for faculty who have experience teaching the Freshman Seminar are planned during the academic year and offer an opportunity for these professors to refine their Seminar class.

Last fall the National Center for the Study of The Freshman Year Experience located at the University of South Carolina conducted a national survey of freshman seminar programming. Results of this 41 item survey from JMU's peer institutions and other Virginia state universities and colleges were requested by the Madison Institute from the National Center. Of JMU's 24 peer institutions, eleven did not return a response, two indicated that they do not have a freshman seminar course, and eleven indicated the existence of such a course. The Center did not receive survey responses from Radford, Longwood, VCU, Norfolk State, or George Mason.

Virginia Tech, the University of Virginia, and Mary Washington College responded that there is no freshman seminar at these institutions. The College of William and Mary, Virginia State, and Old Dominion University indicated that a freshman seminar course is offered at their institutions.

In the survey, each institution was requested to identify the type of freshman seminar that was offered. Six choices, including an **Other** category, were described. **Extended orientation seminar** includes an introduction to campus resources, time management, study skills, career planning, cultural diversity, and student development issues. **Academic seminar** is typified by a course with generally uniform academic content across sections and is sometimes interdisciplinary or theme oriented. It will often include academic skills components such as critical thinking and expository writing. **Academic seminars on various topics** will generally be elective courses with specific topics such as urban culture, the AIDS epidemic, etc. **Professional seminar** is generally taught within professional schools or specific disciplines. **Study skills seminar** will focus on basic skills for academically underprepared students.

Of the eleven peer institutions that responded, seven indicated that their freshman seminar course would fall into the extended orientation seminar category and three of this group combined their course with the professional seminar and/or study skills seminar categories. Two peer institutions offer a course that can be classified as the academic seminar on various topics type, and the remaining two peer institutions indicated that their freshman seminar course is a combination of this type with the extended orientation seminar category. Of the three state institution respondents, William and Mary and VSU categorized their freshman seminar as the academic seminar on various topics type, while ODU indicated a combination of extended orientation seminar, professional seminar, and study skills seminar. None of the peer or state institution respondents indicated that the freshman seminar course they offer consists of generally academic content across sections, is interdisciplinary or theme oriented, and is part of a required general education core. Of the category choices, this description best characterizes the freshman seminar offered at JMU.

Some other interesting results of the survey include that only three of the eleven peer institutions require some form of training for freshman seminar instructors and none of the three state institution respondents require any such training. Of the fourteen institutions total, three require all freshmen take the seminar, four require some freshmen enroll in the course, and seven don't require freshmen to take a seminar type course. The maximum number of students allowed to enroll in each freshman seminar section ranged from 15 to 35 with 20 or 25 being the most common maximum enrollment figures. The number of sections of the freshman seminar offered at these institutions during the fall 1991 semester included a low of one to a high of 50.

From its thoughtful and deliberate inception, the Freshman Seminar offered at James Madison University has proven to be unique in its academic orientation and its commitment to teaching excellence. The administrative and pedagogical challenges of LS 101 continue to require the Freshman Seminar Coordinating Committee to reassess objectives, clarify goals, and offer professional development. David Roller, et al., as quoted in Swora and Morrison, recognizes the fundamental necessity of an interdisciplinary emphasis on the undergraduate level where, he contends, ". . . some kind of course studying how academics seek and create knowledge, rather than one dispensing that which we have already learned is an appropriate and necessary part of a freshman curriculum."[3] The Freshman Seminar provides an interdisciplinary basis for the liberal studies program and seeks to diminish the common practice of offering a series of unintegrated courses.

Attachment A

JAMES MADISON UNIVERSITY
1991-92 FRESHMAN SEMINAR READING LIST

The faculty of James Madison University welcomes you to the intellectual community and to the challenges and rewards of college. The works cited below form the basis of the Freshman Seminar, a course you will complete in your first year at the university. These books are intended not only to expose you to writings which have enduring interest and value, but also to prepare you for the kind of independent, challenging study you will undertake during your undergraduate years with us.

The works on this list are available at the JMU Bookstore during the Freshman Orientation sessions and we suggest you purchase them during that time to give yourself an opportunity to become familiar with these books before your arrival in the fall.

Science and Human Values by Jacob Bronowski

Jacob Bronowski, perhaps most widely known for his documentary PBS series, *The Ascent of Man*, looks at science as a human activity in this work. He asks questions about the basis of science, its use, its value and its relationship to other kinds of human activity. The answers he offers are complex and fascinating. He presents a perspective on how and why science is done that you have probably not encountered before. You might read this work, as you might any work, with an eye toward questioning the assumptions Bronowski makes. Do his arguments seem valid to you?

Songs From the Alley, by Kathleen Hirsch

The lives of Amanda and Wendy, two homeless women in Boston, are chronicled in this work by Kathleen Hirsch. The tragic life histories of these women goes well beyond the familiar ideological discussions of homelessness. You, as the reader, will be challenged to understand how the devastation of homelessness can become a compelling option for some persons and to take a good look at what we, as Americans, have been and what we are. It will provide a context for a very complex societal problem and give an insight into the question, How do people end up like this?

Tao Teh Ching by Lao Tzu (translated by Stephen Mitchell)

This work is an ancient, classic text, but most of it may seem unfamiliar to you at first. The *Tao Teh Ching* is called a work of wisdom literature. What wisdom does it present to you? This book can also be viewed as an artifact of another culture. What does it say about this culture? Why might this work have survived the centuries since its composition? What ideas does it present that are familiar? What ideas does it present that seem foreign to you?

***The Odyssey* by Homer** (translated by Robert Fitzgerald)

You may have read some parts of this work before, but we ask that you read it in its entirety as a college student. You might look at this book, not only as a classic work of ancient civilization, but also as the story of a culture hero. Odysseus can be seen as a person trying to create or come to terms with his identity in a changing world. This struggle is familiar to us all. How does he decide to meet this challenge? What does this say about his values? Homer's writing is often cited as a classic work of "our culture." What ideas or values seem evident both in this work and in our culture today? What ideas or values seem foreign?

Endnotes

1. Adapted from *The Freshman Seminar at James Madison University*, Proposed Assumptions and Working Principles, and Goals and Purposes. November 1, 1987.

2. Newell, William H., "The Role of Interdisciplinary Studies in the Liberal Education of the 1980s," *Liberal Education*, Vol. 69 (Fall 1983), p. 245.

3. Swora, Tamara and James L. Morrison, "Interdisciplinarity and Higher Education," *The Journal of General Education*, Vol. XXVI, No. 1, p. 51.

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Newell, William H., "The Role of Interdisciplinary Studies in the Liberal Education of the 1980s," *Liberal Education*, Vol. 69 (Fall 1983), pp. 245-55.

Swora, Tamara and James L. Morrison, "Interdisciplinarity and Higher Education," *The Journal of General Education*, Vol. XXVI, No. 1, pp. 45-52.

AN ANALYSIS OF STUDENTS' END-OF-COURSE COMMENTS: IMPLICATIONS FOR TEACHING

Raymond W. Campbell

Qualitative comments recorded by students on their student rating forms provide keen insights into college teaching. An analysis of students' end-of-course comments regarding the teaching of 49 faculty members in a multidisciplinary department over two semesters indicates that faculty either consciously or unconsciously incorporate positive and negative factors into the planning and delivery of their courses. This paper focuses on the factors identified by students as relevant to the achievement of effective teaching and benefits faculty who actively pursue and experiment with teaching improvement strategies and reflect on those experiences.

While the literature describing the effectiveness of feedback from student ratings of instruction for producing teaching improvement is characterized by inconsistency (Aleamoni, 1987), it does emphasize several concomitant principles of good practice regarding the use of rating instruments, including: (1) Student ratings should not be employed alone but as one of the components of a multifaceted instructional improvement program. (2) When possible, feedback from student ratings should be communicated to individual faculty members as part of teaching improvement consultations. Practices like these hold great importance for administrators and faculty who have responsibilities for improving teaching. These practices assume even greater importance in today's higher education environment of changing demographics, new enrollment patterns of students, and increased competition from other providers.

For the past eight years, the Department of General Studies of Thomas Jefferson University, a multidisciplinary department that serves both traditional and nontraditional students, has included the use of student ratings as part of its instructional improvement program. Other components of the department's instructional improvement program include seminars on teaching, dissemination and discussion of

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Raymond W. Campbell, Chairman, Department of General Studies, Director of Continuing Education, Thomas Jefferson University, Philadelphia, PA current articles on teaching and learning, classroom observations, individual consultations, and teaching portfolios. Over this eight-year period, the teaching skills of the department's faculty have developed to the point where every member is rated as effective, highly effective or outstanding. Consequently, for faculty who are effective or highly effective, the chairman often finds himself in the fortuitous position of determining what steps these individuals can take to improve their teaching and move toward an outstanding level of performance.

In consulting with individual faculty members about their teaching, the chairman has often found himself relying on the qualitative comments recorded by students on their student rating forms for the added insights necessary to comprehend fully the teaching effectiveness of faculty. However, these qualitative comments are returned to the instructors on the original rating forms and never summarized like the students' quantitative responses. In other words, while there is some common sharing of the quantitative responses in the aggregate among the department's faculty members, the disclosure of the qualitative responses beyond an individual consultation with the chairman is left to the individual faculty members. The extent to which they choose to discuss these comments with their faculty colleagues appears to be limited at best. Consequently, the potential learning that would result if faculty had equal access to each other's students' comments is lost. In short, a student rating system is in place to collect timely data, but the department does a much better job of utilizing the quantitative information than it does the qualitative data.

This paper will focus on the factors that positively or negatively influence the effectiveness of classroom teaching and learning from an analysis of students' written comments regarding the teaching of 49 faculty members over two consecutive fall semesters. Students' positive and negative comments provide important information about their learning experiences, even though the latter typically refer to the absence of certain ingredients. Over the years, students' written comments have indicated that, in addition to teaching the facts and principles of their courses, some faculty either consciously or unconsciously incorporate positive and negative factors into the planning and delivery of their courses.

For purposes of improving teaching and learning, this discovery, in combination with the faculty's responsiveness to the department's teaching improvement efforts and the academic needs of its undergraduate students, points to the importance of reinforcing the positive factors and eliminating the negative factors. A first step toward achieving this end is the identification and communication of these factors to the department's faculty. With increased awareness, the potential for improved teaching and learning becomes enhanced. Faculty from other institutions who actively pursue and experiment with teaching improvement strategies and reflect on those experiences may benefit from the opportunity to hear in a summative fashion what students have identified as positive and negative factors relevant to the achievement of effective teaching.

From the various student comments, conceptual categories were generated and compared to one another. Current literature on teaching and learning was used as a resource in defining categories. The analysis of the students' comments, however, remained the focus of this study, not the verification of extant findings in the literature. Because the analysis focused on faculty from one department in one institution, the generalizability of its findings beyond this single institution is limited. Nevertheless, the findings below do support the existing body of knowledge on effective teaching and learning. The analysis yielded seven categories or factors: presentation, management, communication, relationship with students, testing, physical arrangements, and textbooks. The remaining portion of this paper is devoted to a discussion of each of these seven categories as well as a conclusion.

Presentation

As might be expected, students frequently acknowledge the competence of their instructors regardless of the level of teaching effectiveness at which they rate their instructors. However, for the outstanding teachers, the students also pay tribute to the teachers' abilities to instill an interest in the subject by presenting the material in a creative way, which often includes supplementary materials (e.g., crossword puzzles), guest speakers (e.g., a transsexual in a Human Sexuality course), and special projects (e.g., presentations by students on course-related topics of special interest to them). From the data supporting this category, it can be inferred that outstanding teaching rests on a variety of instructor-designed, teaching-learning activities.

Students also note the efforts of outstanding instructors to teach a course at a level that is in synchronization with their abilities. For example, one student wrote the following comment about the outstanding teacher that she had for English Composition: "The instructor presented all material in a way that students understood what was being taught." From this comment, it sounds as though this student believed that she and her classmates were learning what the teacher was teaching. A common trademark associated with these efforts by outstanding faculty to synchronize their teaching with the readiness level of the students is the use of a brief questionnaire at the first class meeting to gauge the level of the students' knowledge. More and more of the outstanding faculty employing this practice are also now requiring students at the end of each class session to write brief summaries of what they have learned. The instructors collect these summaries, review them and address any misunderstandings that were identified in the summaries at the beginning of the next class. In utilizing this technique, instructors have been amazed at how differently students in the same class explain important concepts. Outstanding instructors are informed about their subject, their students' readiness to learn and their students' understanding of the topics at different points throughout the course.

Management

Management of time in the classroom appeared as a frequent comment in two variations: (1) In individual class periods, the effective and highly effective faculty sometimes cover material too quickly and (2) Some instructors are so repetitive (that is, beyond the purpose of repetition for understanding and remembering) in individual classes that they have to hurry near the ends of their courses to cover remaining material. These two comments point out very clearly both the importance and difficulty in pacing the coverage of a course's content. In turn, this particular category of skills has much to do with the anxiety level experienced by students in a course. The pacing of a course at a level that creates a moderate amount of anxiety in the students as opposed to too little or too much has been known for a long time as a key ingredient to effective learning (McKeachie, 1978).

Management in the sense of classroom control and discipline also appears to be less in place for the effective and highly effective faculty. One of the student comments in this area read as follows: "At times, I felt people in our class were allowed to get out of control too easily. Students made rude comments and unfounded complaints." While students value an instructor who establishes a classroom atmosphere conducive to student involvement, they also expect the instructor to ensure the academic integrity of the learning process at all times.

Communication

A person needs only to look at a communication model or two in a basic public speaking textbook to realize the complexity of communicating to another person or to a group. The process becomes even more encumbered when viewed within a college classroom setting where a content expert is attempting to communicate his knowledge to students. In rating instructors as outstanding, students often compliment teachers for their ability to respond effectively to their questions and comments. Often this type of comment is in recognition of instructors' efforts to check their responses with their students as part of responding. As one student wrote: "She is patient and knowledgeable and makes sure everyone understands the material." For instructors who receive effective or highly effective ratings, their verbal communication skills are sometimes called into question in the areas of articulation, variation of voice, level and loudness. It is interesting to note that most of the negative comments within this category were focused much more on rudimentary skills of communication than on the process of communication that characterized the positive remarks associated with the outstanding teachers.

In the area of written communications, students appreciate a well-constructed syllabus and find it helpful when an instructor takes the time to review it with them thoroughly. Instructors receiving outstanding ratings do this as a matter of course. Frustration sets in for students, however, when teachers, who distribute wonderful handouts on each major topic, do not follow their own handouts.

Relationship with Students

What keeps effective or highly effective faculty from becoming truly outstanding teachers? The relationship between teacher and students is central to the teaching-learning process. An outstanding teacher's approach in the classroom fosters a sense of cooperation and collaboration and a feeling of mutual respect. Two of the students' comments indicative of this factor were:

> The instructor was available and willing to offer students extra help when requested.
>
> The instructor displayed patience, encouragement and respect toward the students.

Another student took a slightly different perspective and even offered her own suggestion for improvement:

> My only complaint is that there was not enough opportunity for the class to participate in discussions regarding the material. You could choose to include more information in your topical outlines to eliminate some note taking time in order to allow more class participation.

Reliance on the lecture method with little or no opportunity for students to participate actively in the learning process works against the development of a strong relationship. Even in content-laden science courses, outstanding instructors have learned to modify their lectures in ways that encourage student involvement. In the teacher's presentation, this is accomplished through the inclusion of questions and provision of opportunities for students to ask questions or make comments. A female student indicated the following in regard to this factor: "She explained the material in an appropriate manner and kept the class into it by asking questions and having much class participation."

As part of this category, effective or highly effective faculty are often characterized by students as lacking a strong sense of enthusiasm for teaching. The following comments capture this concern very clearly: (1) "Teacher was annoyed at questions" and (2) "Teacher was overbearing, strong-headed, could not relate to students--not receptive to questions." In short, some teachers' verbal and nonverbal messages communicate to students that their love for the subject matter is more directly tied to their research and/or consultations outside academe.

Testing

The outstanding teachers communicate a positive attitude toward their students about succeeding in college, generally, and on tests, specifically. Outstanding faculty often devise ways to make tests and/or evaluations less threatening, including efforts to educate students about the importance of tests as aids to learning. Practically speaking, they may allow students to drop their lowest test grade, delete test questions deemed unfair in some way, or encourage students to re-take an alternative version of an examination in an effort to achieve minimal competency in a certain area. Their focus is on students achieving at least minimal, if not maximal, competency. They make a concerted effort to test the students on what was covered, and the grading of their examinations is clearly understood by the students.

On the negative side, students were particularly bothered by poorly worded examination questions (e.g., "Sometimes the instructor uses terms or expressions on tests and exercises that have not been covered"), the number of test questions assigned to certain topics (e.g., "Too many questions on plants and not enough on animals"), and failure of instructors to provide sufficient feedback on returned written assignments (e.g., "The instructor returned our weekly lab reports with only a letter grade. You were never sure why one report earned a high grade and another one earned a low grade"). A key finding here which seems to be characteristic of outstanding teachers across all categories is that when they engage in behaviors that adversely impact the learning environment they are quick to correct the deficiencies.

Physical Arrangements

Physical arrangements pertaining to a course are not something that most instructors have control over or even take into consideration in their planning and preparation for teaching. This particular factor cuts across all teachers regardless of their level of effectiveness. In one sense, it could be eliminated as a meaningful factor related to effective teaching. In another sense, it qualifies as a necessary but not sufficient condition for effective teaching. Typical comments in this category concerned the size of the room being too small or too large for the group, poor lighting, fluctuations in room temperatures, type of seating (fixed versus moveable seating), and failure or non-delivery of audiovisual equipment. The importance of this factor is indicated in the following student comment: "The extremes of temperatures in the room affected my ability to concentrate during class and on tests."

This factor suggests at least three possible steps for consideration by faculty striving to become outstanding teachers: (1) Good course planning should include requesting a room that can accommodate a faculty member's preferred style of presentation, including seating arrangements. (2) For whatever reason, when an assigned classroom is unsuitable for a course, a faculty member should assertively seek a room change. (3) When problems arise with an assigned classroom and/or equipment, faculty should report the problems to their chairperson as well to officials responsible for physical facilities and equipment. By doing this, the faculty members will have helped to sensitize their chairpersons to another intricacy of the academic environment that can affect teaching.

Textbooks

Comments regarding textbooks required in courses appear to be on the rise. This increase in responses may be partially influenced by the rising costs of textbooks. Nevertheless, students are especially appreciative of a textbook that serves as a resource to them when they are not in class or able to contact their instructors. Outstanding instructors seem to have a knack for choosing textbooks that serve this purpose well. The notion of a resource implies that the book is well-written and that a close complementarity exists between the teacher's presentations and the book. On the other hand, teachers rated at less than outstanding levels choose textbooks that are perceived to be long and/or very technical in nature. Comments in support of this category included the following: (1) "I found the book more difficult to understand than the instructor's explanations" and (2) "The book was good once the instructor explained things. You could never teach yourself with this book."

This factor raises the question as to how textbooks are selected even in those cases where a department's faculty specifies the required textbooks for all of its courses. There is little in the literature that talks about the criteria used in making decisions about textbooks. Do faculty talk to their colleagues who teach similar courses at other institutions for suggestions? Are they influenced by the sales representatives of the various publishers? Going back to the idea of a textbook as a resource, are there particular characteristics of a textbook that help to define it as a resource? In short, how explicit in the minds of faculty are the criteria for choosing a textbook? Neff and Weimer (1990) provide an example of a textbook selection checklist that focuses on the layout of a textbook in regard to its ability to foster student learning.

Conclusion

The above factors were derived retrospectively from an analysis of two semesters of students' comments about a department's faculty. While the analysis yielded findings parallel to those in the literature on effective teaching and learning, the analysis lacked the type of controls more characteristic of prospective research utilizing quantitative methodology. Therefore, the findings discussed herein may have their greatest utility in helping to form hypotheses that can be tested in larger and more controlled studies. Nevertheless, for individual departments and colleges interested in improving teaching, this type of study can serve a dialogic function in encouraging faculty who are already effective or highly effective teachers to reflect on their teaching and actively experiment with different ways of teaching.

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TEACHING THE CANON: TEACHING THE DEBATE

Marie D. Eaton

As a response to the debate about what should be included in the "canon," Fairhaven College, an interdisciplinary college within a larger regional university, developed a course which examined how new paradigms confront conventional knowledge, and presented how these new "truths" and old "knowledge" might engage in dialogue with each other. The structure of the class not only presented challenges to the content studied, but also experimented with shifting the traditional roles of student and teacher and the faculty's relationship to their peers. This experimental class resulted in meaningful gains in both student and faculty development.

During Winter Quarter 1990, Fairhaven College responded to the challenge raised by Gerald Graff and William Cain in their article "Peace Plan for the Canon Wars."

> In short the best solution to the conflicts over the canon, the curriculum and the culture is to teach them. Teach the conflicts themselves and use them as a principle of correction. Structuring the curriculum around these conflicts would give it the coherence traditionalists rightly demand, but which cannot be achieved by any unification program. (p. 312)

The themes in classes which comprise any university's curriculum make up a potentially coherent conversation, but they are not experienced as a conversation by most students, who encounter its different voices in separation from one another. Imagine, then, a course named *Canons in Conflict.* The point of such a course would be neither to discard nor to deify the traditional classics but to put them into relation with the texts and ideas now challenging them.

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The theme, *Canons in Conflict*, had origins in the curricular controversy sparked by Stanford University and such books as Alan Bloom's *Closing of the American Mind*. In this course the Fairhaven faculty examined how new paradigms confront conventional knowledge and how new demands in curriculum challenge the great books, great ideas and great men of the past. The class brought to the surface for discussion some of the following questions: How and why do we change our views? our beliefs? our society? What are the positive values of tradition? What is the nature of authority? Do canons reflect class, gender and racial biases? What is the nature of knowledge and truth?

We found that using the debate about the Canon as a focus for the curriculum, plus some significant changes in the structure of the quarter (participation from all faculty, substantial student involvement, faculty as learners and a coordinated study format), resulted in changes in student intellectual development that were greater than expected and some significant faculty development outcomes.

Major Elements in the Design of the Quarter

Canons in Conflict required the entire thirteen-member faculty to work together and learn from each other. Each instructor was assigned one week during which he or she taught the rest of the faculty about a topic related to the overall *Canons in Conflict* theme. These topics were selected from their own disciplines as representative of the debate about the nature of knowledge. The specific topics were intended to help extend and broaden the larger discussion about how paradigms are challenged. Because Fairhaven is an interdisciplinary college, the range of topics was widely varied. Some examples of the weekly topics include: Science, Evolution, Human Behavior and the Feminist Dilemma, Democracy in China, Professionalism and Social Democracy, Coming to Our Senses: Awareness through the body, Multiple Intelligences: What does it mean to be smart?, and The Right to Counsel and Tribal Sovereignty: Canons of individual rights, political authority and the law.

Each faculty member prepared a week of readings, lectures, activities, films and discussions for their colleagues and for the students. The formal instructional sessions were largely directed toward the teaching of other faculty. These sessions were witnessed by the students. Students were expected to read all the material, participated in the large group discussions and met in small student-led seminar groups. Eighty-five students, almost two-thirds of the college, joined the course.

The class met fifteen hours a week, 9:00 am to 12:00 noon daily. Half of each morning involved faculty participation. At 10:30 the large meeting divided into six seminars, each with two student facilitators and a weekly rotating faculty member restricted to a non-teaching role. The two student facilitators were responsible for leading discussion, group process, and keeping to the issues. Student membership in the seminars remained constant through the quarter. In these seminars students reflected on the behavior and the ideas of faculty in the large sessions and discussed the topic of the week and assigned readings.

Faculty evaluated each other weekly, while students were responsible for assessing themselves and the other students in each seminar group. Final evaluations were written by faculty using these self- and student-to-student assessments as well as their own observations. (Fairhaven College has always employed narrative evaluations instead of letter grades.)

The quarter was an exciting one with both planned and unplanned results. The remainder of this paper will describe some of the things the college learned from this experiment.

Student Shifts in Intellectual Development

William Perry (1970) developed a model for describing student intellectual development in the college years. In this model he describes four major stages: Dualism, Multiplicity, Relativism and Commitment in Relativism. Dualism is characterized by a belief that there is "one truth" and that knowledge exists absolutely. In the Multiplicity stage, students begin to understand that questions may have multiple answers yet view all opinions as equally valid. As students move into Relativism, they begin to examine various points of view within a context and as pieces of a larger whole. As they develop Commitment in Relativism, they acquire a growing realization that they need to find their own choices based on these multiple "truths."

As students in *Canons in Conflict* struggled with the conflicting ideas presented, we found that they began to develop different notions about knowledge. Through the study of multiple "truths" students developed broader understanding of the nature of truth, moving from Duality to Multiplicity and into Relativism on Perry's model. Their own voices reflect this shift.

> Seeing how knowledge is usually contextual. . .has let me have a more critical eye, more questioning intellect, especially when it comes to assumptions (Sophomore, facilitator, follow-up sheet).

> [I was . . .] affected by the relative nature and the bombardment of perspectives and information. There was simply no place to stand with so many conflicting truths (Senior, facilitator, follow-up sheet).
>
> Canons changed the way I look at my universe, perhaps forever. The change was not instantaneous, but slow, as if by incubation (Sophomore, facilitator, follow-up sheet).
>
> [Canons. . .] made me think a lot about knowledge, and the social construction of reality. . . I thought a lot about truth - is there a truth? No truth? Maybe many truths. . . . Thinking about truth has immensely influenced my educational path and choice of classes (Junior, facilitator, follow-up sheet).
>
> I confronted assumptions about truth's rigidity, heightened a growing awareness of knowledge as fluid, not static. . . Canons helped re-structure personal paradigms, keeping and discarding previous components and integrating new (Junior, facilitator, follow-up sheet).
>
> [I learned] the importance of cultural relativism and understanding the cultural and historical context for history through Canons in Conflict (Sophomore, participant, Concentration proposal).
>
> [Canons. . .] made me really have to look at others' beliefs and ideas. It made me realize some of the diversity that exists in the world and to begin to appreciate the beliefs of others as well as my own (Frosh, participant, follow-up sheet).

The changes in the structure of the quarter also facilitated shifts in the understanding of the role of authority which is one of the characteristics of movement from Multiplicity to Relativism in Perry's model. Again, the students speak for themselves:

> The experience of watching the faculty grapple with the issues an conflicts was extremely helpful in my own processes. Seeing the faculty in action in this new way closed the gap between them and me. I saw that I could do what they did. It demystified the faculty (Senior, facilitator, follow-up sheet).

> A 12-credit class called Canons in Conflict was a turning point because I facilitated a daily discussion group during the entire quarter. Becoming comfortable speaking in groups has make me feel more responsible for my own and others' learning, and has helped me realize the importance of a public voice, especially to myself (Junior, facilitator, Senior Summary).

> For the first time in my education, I was encouraged to find my voice and use it to question and respond. Rather than memorize and regurgitate someone else's opinion, I was expected to form my own and to critically examine - and respect - others' viewpoints. While I was adept at doing this in the interpersonal arena, I had never been encouraged to question academics, persons who had previously been promoted as semi-deities (Junior, facilitator, follow-up sheet).

Students also gained an understanding that personal conflict may be an essential part of learning as old ideas and "truths" are challenged by new knowledge and understanding. Perry's model describes typical responses to this kind of conflict as retreat, temporizing and escape. Students describe their own understanding of the role of conflict in learning.

> Canons, I hope, taught me that to be friends and scholars, we don't have to agree. We must be outspoken, reasonable, and above all, tolerant (Junior, participant, Senior summary).

> Even without benefit of experience, it would not have been difficult to convince me of the educational value of a community learning experience such as Canons. Mutual student/faculty responsibility, group learning, discomfort with content/process and a forum to discuss that uneasiness were invaluable to my learning process. . . . Significant learning is rarely comfortable or easy - the ability to understand and accept new ideas often demands a shaking of one's intellectual/spiritual/cultural foundations (Junior, facilitator, Senior summary).

Faculty Development: Faculty As Co-Learners

We also found that using the Canon's debate as a focus for the curriculum, plus the significant changes in the structure of the quarter (participation from all faculty, substantial student involvement, faculty as learners and coordinated study format) resulted in changes for the faculty as well. Like many small colleges or departments, Fairhaven's faculty have worked together for many years and have developed predictable patterns of behavior in their interactions with each other. These patterns are not always productive. The process of co-teaching and learning in this course had some measurable faculty development outcomes. The faculty as co-learners were able to observe the teaching styles of other faculty and participate in their sessions as learners. Increased dialogue about curricular and pedagogical issues resulted, and faculty began to view themselves as more collaborative.

As part of the design of the quarter, faculty assumed the various roles of teacher, learner and student during different weeks. In turn, students observed faculty as co-learners and took the responsibility of facilitating the discussion groups. There were some long range effects from this change in the power balance, in the shift in roles and in the exposure to other faculty members' teaching and learning styles.

> The strongest lasting impact. . . was from the content. I think I read everything and I remember amazing amounts. The way it stuck with me is surprising. I think of things I read that quarter continually. I read in the newspaper about China and I think of the readings and lectures from that week. . . That happened with every subject we encountered in the quarter. I remember the readings, talks and the information with a clarity. I remember the readings much more clearly than things I assign in my classes. . . I think it's partly because in a different way I was a student again, reading the stuff and deliberating in the sessions I was more engaged in what I was reading. I was learning in a different format; learning with all the faculty. There was a sense of shared learning (Faculty).
>
> Yet another surprise at Fairhaven was the nature of student-faculty interaction. In my observations of academia, seldom had I seen exceptions to hierarchical relationships between students, faculty, administration and staff. Mutual sharing and participation in the learning process in Canons was a welcome surprise (Student, facilitator).
>
> I have felt more confident of my role as a student and more confident of questioning and talking to faculty about their role (Student, facilitator).
>
> Faculty are no longer the center of attention here at Fairhaven (Student).

At the end of the quarter, students described their ideal faculty as "Sponsors; facilitators; more like a midwife than a professional doctor who tells you what is best for you and prescribes things for your well-being; more like a conductor or referee than a controller; someone who thrives on someone else's genius and uniqueness, not their own" (Student).

> . . . .students felt empowered in relation to faculty and facilitators in the seminar groups (at least in mine). . . . In the small groups, the students had a relatively high degree of control and decision making power. The groups were ours (Student).

Some faculty and students gained a broader perspective of the role of conflicting points of view and canons in conflict. They became more comfortable with the ways they disagreed with each other both pedagogically and in point of view.

> I have an increased commitment to inclusion of more than just two voices in all my subsequent courses. I actively provide 3-5 points of view on any issue (Faculty).
>
> I'm less idealistic. I'm not sure if that is positive or negative. I expected a lot that didn't happen. Communication, dialogue and synthesizing higher understanding. We saw the canons in conflict. We didn't get to the level of synthesis and communication. I was looking for more agreement, a sense of resolution. . . I thought that could happen, but it didn't and I was disappointed. Now I wouldn't expect it to happen so I wouldn't feel the same pain. . . I could make more with these lesser expectations (Faculty).
>
> I have noticed the unresolvability of many of these issues and the value in the conflict rather than a need for resolution (Student).
>
> I have faced conflict and I have survived (Student).

The faculty and students developed an increased tolerance for the discussion of differing perspectives and the inclusion of a broader range of perspectives in the curriculum.

> I learned more appreciation for an approach I had been in reaction to. I certainly learned new content (Faculty).

> Every time I begin to think a thing is true, another culture shows me it is my own bias (Faculty).
>
> Now I feel much more comfortable with paradox; I don't need someone to "give" me the answer. . . I appreciate the complexity of issues and I am willing to keep an open mind to the ideas of others (Student).
>
> Seeing both sides of the issues. . .is a really freeing way to think - it opens my mind up to many more possibilities, And I keep in mind, also, that I don't have to buy into anything - just simply check out another point of view. There is a possibility that doing this would change my point of view - but at that point, it would be for the better, I think. I have learned respect for others' points of view. Also other's ways of life - not to assume that they think like me. . . . I assumed that everyone thought like I did . . . (Student).
>
> I tend to "tune out" or close my mind to ideas which go against my beliefs. . . . Canons was the first class which challenged me in this way and I have learned to be more open minded. It now is still a conscious effort, though (Student).
>
> They (group members) taught me to look at the other side of the canon, not just my side. I am shy when it comes to group discussion. I fear that my opinion will not be heard or that I will embarrass myself by saying something that was not intelligent. . . . I feel I have progressed to where I don't feel so afraid (Student).

Both faculty and students began to pay more attention to the role of process in increasing the accessibility of the content to all learners. Some of the long term effects from this quarter has been the inclusion of a unit on teaching discussion skills in the Freshman and Transfer Seminars, the increased use of formative evaluation by faculty during the quarter and an increased sense for the participants of their responsibility as students to make sure class discussions go well.

> I am more conscious of process in the sense that I try to ask the class how it's going. I don't use the evaluation form, but I try to keep more in touch (Faculty).

> I still use the evaluation procedure three or four times since then and found it useful and I actively teach students how to work effectively together in a discussion group (Faculty).
>
> If there anything I am taking with me out of this class, it's a lot more experience and insight (even intelligence perhaps?) about group process. I am more affected by this than almost all of the "content" put together. And for me, personally, that's good (Student).

Other Lasting Changes

This project has had a lasting effect in the curriculum. Other large coordinated study projects have been planned by the college, and we have used the mistakes and successes of *Canons* to guide the planning for these projects. There is more attention to process, discussion skills, learning styles and student involvement and their roles in providing an optimal learning environment. More faculty are using formative evaluation to guide their course development. There is more discussion about teaching style in faculty meetings, both planned and spontaneous.

Students points of view and abilities were changed. Nineteen students said, "This will effect me for the rest of my life." Twelve said they had learned mechanisms for self expression not formally accessible to them before, writing journals, fiction writing, talking with friends and family about these topics. Three students went on to write concentration proposals which directly related to *Canons.* Faculty reported that reference to the Canons quarter came up in class frequently during the subsequent quarters, either in reference to material studied or to point of view gained.

There is a demonstrable change in faculty relationships. They perceive a positive shift in their ability to deal with conflict with each other, in their respect for their varied opinions and their ability to participate together in a group.

> Overall I feel much more in tune with faculty. . . I think we "like" each other more (Faculty).
>
> I have seen the faculty grow and re-energize - to connect in ways they had not in the past and for them to deal healthfully with underlying issues (Student).

Some strong mindsets/prejudgments were not penetrable - but also, somehow, more respect, or at least more humane interactions, does seem to be the long-term outcome (Faculty).

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RELIGIOUS INSTRUCTION IN THE CORE CURRICULUM: THE SECULAR STUDY OF RELIGION IN A CHANGING WORLD

James E. Gibson

The study of religion in the newly emerging core curricula and general studies programs in secular universities offers fertile ground for multi-disciplinary interaction and a globalized perspective. However, the inherent power of religious faith traditions often tempts instructors either to hide from the dynamic aspects of faith and religious practice by retreat to the traditional academic discourse of departmental disciplines or, on the other side, to attempt to recreate some aspect of the sacred world in the classroom inviting the student to enter this world and experience it directly. Both have unfortunate consequences. I offer here a dialogical model of pedagogy for the study of religion in secular curricula that occupies a more productive middle ground.

In general education programs and core curricula being established in university after university, religion inevitably comes to the fore as an essential component. Its influence on history, political thought, economics, art, society and culture is simply too massive to be ignored.

If you are looking for a subject that features qualities that are intrinsically multidisciplinary, pluralistic, global, at once traditional and non-traditional, both marginal and mainstream, conservative and radical, ancient and modern, a subject imbued with questions of value and, purpose, ethical import and fundamental human concern, you cannot find another that carries this weight as does religion. It is an extraordinarily rich and powerful topic.

Yet I have found the prospect of teaching religious studies daunting to many outside the discipline. Otherwise talented, creative, successful teachers express strong reluctance, even anxiety at the prospect of dealing with the subject. It is not just the lack of formal training, although this is often the case. Rather for some it is

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a matter of personal aversion born of their own negative experience, or a discomfort at the prospect of dealing with a topic reflecting their personal commitments. Other simply have a sense that here lie monsters of the deep and the dark, that this subject has unknown dangers they would rather not cope with in the classroom.

All these anxieties are voiced through a series of typical questions: How do I avoid embarrassing confrontations with students wanting to witness to their faith in the classroom? What is my role as a teacher vis-à-vis my own faith commitment or lack of it and the students? What do I do when I encounter clear prejudice and bias in the classroom? Can we be openly critical of sacred texts?

I have no intention of diminishing the reality of these concerns. The study of religion does contain pitfalls and dangers unique to the discipline. First we have constantly above us the brooding presence of the Supreme Court ruling, Abington v. Shempp (1963), concerning the distinction between the practice and the teaching of religion in state-funded schools. For secondary schools, this ruling, although it advocates the academic study of religion, has nearly eliminated such study from the curricula. As a consequence you can be certain that, for the most part, students in the core and general education courses will have almost no accurate information at all about any religious tradition not their own. Often what they know about their own tradition is minimal as well.

In state-funded colleges and universities, instructors tend to be aware of the court's ruling and attempt its strict observation, even if they do not completely understand it. But it leads to odd consequences. Consider the prospect of being allowed to teach composition, but not practice it, to teach chemistry but not practice it, teach mathematics, but not practice mathematics. [1]

Second, in spite of the advertised secularity of our culture, the reality is that religion is a live option, as William James would say, for many students in the classroom. Not only live, but sparkling, explosive, passionate. Coupled with lack of knowledge or downright misinformation, this passion often leads to expressions that reflect an unknowing religious prejudice. This same passion also often leaves the student with a profound sense of discomfort about using critical methods of discourse with sacred texts.

This discomfort, as I mentioned before, is often shared as well by the instructor no matter what position he or she has with regard to the subject. One of the major concerns I hear expressed is that of precipitating a crisis of faith in the student. Should instructors be concerned over this issue? Do we have an obligation to protect students from over zealous critics of religion as much as we have an obligation to protect them from missionizing evangelists? I have seen committed Marxists preach the case against religion with as much fervor as Jimmy Swaggert, although usually not with the same theatrical appeal.

Aside from the emotional issues there are a variety of other pedagogical problems. What texts should we use? What traditions shall we include and what approach shall we use in analyzing the texts and practices of the traditions? These too are serious issues. Clearly instructors need pedagogical models. And few of these are readily available.

There are two temptations, actually opposite ends of a spectrum, that offer deceptively inviting solutions to the methodological and emotional issues surrounding the academic study of religion. I will describe each of them briefly here and offer reasons why we should yield to neither. Last I will offer a third and more appropriate pedagogical approach based on the notion of interreligious dialogue.

The first temptation is to avoid the power of religion altogether by falling back on methodologies from academic disciplines outside of religious studies, usually one's own, and teach from that perspective entirely. The philosopher will approach sacred texts entirely as evidence for or against metaphysical or ethical theories and critically evaluate their validity or soundness in the classroom. The historian will read Exodus exclusively as a historical account of a religio-political movement in the ancient middle east. The biologist will read Genesis as a scientific or prescientific account of creation, then compare it dismissively with Darwin's *Origin of Species*. The anthropologist, the political scientist, the psychologist will all take a similar tack, all making the claim to have crossed out of their discipline, but rigidly enforcing the methodological canons they find most comfortable.

When all else fails, the instructor falls back on the tried and true Bible as literature approach, where Job and Ecclesiastes are celebrated as great works of art on an equal par with Dante's *Inferno* or Shakespeare's *Lear*. With this approach the class can critically analyze the text with absolutely no fear of sectarian controversy or any concern at all with the impact of these texts on the lives and experiences of communities of faith.

Admittedly these approaches have the weight of history in their support. They all provide a hedge against theology. Historically, this is an important issue. Before the inclusion of religious education in the modern secular academic arena, the study of religion was exclusively a theological or intra faith task. The scholar and teacher's purpose, in this kind of study, is the promotion of faith and the preservation of the faith tradition through indoctrination or conversion. Here the textual study and interpretation presupposes Divine inspiration of some kind and texts that are true either literally or symbolically. The reader interprets correctly because he or she believes correctly.

It is in distinction to this point of view that most scholars will define the secular approach to the study of religious texts and practices. The historical account of the modern development of this secular approach and its promotion in contemporary universities would take volumes to cover in any detail. Suffice it to say that religious studies departments in the modern secular universities have inherited a bewildering variety of methodologies. Some departments adopted the "may a thousand flowers bloom" approach aimed at the development of pluralistic departments. Others attempted to ignore methodological issues altogether siding with William Cantwell Smith's assertion that they are "the massive red herring of modern scholarship, the most significant obstacle to intellectual progress, the chief distraction from rational understanding of the world. "[2]

Consequently, religious studies continues to borrow from academic developments in other fields and the norm is now an increasing proliferation of approaches based on existentialism, hermeneutics, new criticism, literary criticism, reader\response criticism, structuralism, feminism, Marxism, postmodernism, postliberalism, narratology, and current theological innovations.

Naturally all these methodologies filtered into the classroom as pedagogical approaches. The fact is religious studies as an academic discipline has been in the throes of a prolonged identity crisis ever since its inception, and this disciplinary neurosis has shown no signs of abating in the recent past nor hope for thorough cure in the near future. No wonder teachers feel safe in importing their own methodologies to teach the subject in the core curriculum. [3]

Many would argue that any of these methods and disciplinary approaches secure teachers in a stance of neutrality and objectivity that protects them and the class from the noxious sectarian controversies of religious traditions. To the same extent that we can critically study any other object appropriate these disciplines, we do the same with religion. A rigid separation of practice from study is clearly maintained.

It would be absurd to dismiss these traditional methodologies as completely mistaken or misleading. Each has made substantial and meaningful contribution to the study of religion. Each is certainly appropriate in the secular classroom. My objection is to the exclusive use of any one of these methods of approach as the only introduction to the study of religion. Taken alone they offer at best a partial picture of the human encounter with the sacred. For the student encountering the subject for the first time, this partial picture can be fundamentally misleading.

The core of the problem in not only the tendency of those working within these disciplines to ignore the personal passions involved in the religious sphere. More at issue is the nearly universal tendency of these methodologies to disallow the committed believer or member of a community of practice to speak from within their tradition. This is a particularly troublesome deficit. The claim is that in this sphere one's involvement in the community of faith has important consequences for the nature of one's understanding, and this claim has substantial merit.

For instance, the knowledge of what a sacred text means to a committed member of the faith community is of fundamental importance in understanding that text. You may not need to be a romantic to understand Wordsworth. But the argument that only a believer in Islam can possibly understand the true power of the Koran as a sacred text to move the hearer spiritually, emotionally, ethically and politically should be taken extremely seriously. The sacred text takes its meaning from the full context of spiritual belief, practice, and experience. To ignore this context altogether is practically foolish and academically irresponsible.

Under the disguise of objectivity (a concept so criticized these days it hardly serves much purpose anyway), the traditional disciplinary approach ignores the heart of religious phenomena. The power of religion to affect human life and experience cannot be fully understood by examining the subject only from an external point of view. Clearly, there is much to learn from such observations. But the force of meaning and purpose religious texts provide--truths so profound the believer would be willing to sacrifice his life to save each syllable from oblivion--this force cannot be accounted for entirely from a supposedly neutral perspective.

The opposite end of the spectrum, however, holds equal danger. Here, the temptation is to attempt to immerse the student or the class into a recreation of the religious world, as one might immerse the student in the world of a particular historical epoch, or into the world of the Enlightenment. If we can only truly understand certain aspects of the power of religion from within the world of religious experience, then we should find ways to guide the students into a community of practice or into the realm of religious experience so that the student can truly understand.

At least two movements in contemporary religious studies are guided by this premise. One is what I call the participationalist approach. The other is the post-modern or post-liberal theological approach. I will examine each briefly.

Examples of the participationalist approach include Sam Laeuchli's Mimesis process, the Bibliodrama methods currently popular in western European lay religious movements, and certain New Age week-end ritual seminars such as Jean Houston's New Dhromidon and Robert Bly's Men's Myth retreat. Common to all is the use of techniques of psycho drama, encounter groups, story telling and ritual practice to create with the participants a direct experience of the world of a religious story or work of art.[4]

The participatory techniques claim two advantages over traditional disciplinary approaches. First they allow a hermeneutic stance within the world created by the text or religio-mythic framework that is both privileged and temporary. One does not need to actually believe the myth or adopt a stance of faith in the tradition from which the story arises. Yet at the same time, the participant has a direct and living experience of this world from within. The participants, helped by the leader, create an alternative world all can enter and through this entry they come to understand both themselves and the meaning of the story through which the world is established.

This new understanding leads to the claim of a second advantage of this approach. The participants now have the opportunity to change their identity, to be healed, transformed or to grow in new and creative ways, and therefore better adapt or function in the non-mythic, normal world to which they must eventually return. Not only have they immersed themselves in the world of the sacred and understood from that point of view, they have also directly experienced the therapeutic power of the sacred in their own lives.

These participatory approaches compare with post-liberalism. Post-liberals base their educational theory on the notion that public linguistic categories or frameworks shape "the pre-experiential physical basis of their conscious experience and activity."[5] Experience is the product of language rather than visa versa. This contradicts the 'liberal' notion that religious understanding can take place on the grounds of a common or core religious experience. This common or shared experience, expressed differently in diverse religious traditions, serves as a basic referent for translating religious ideas and concepts from one language or framework to another. If the post-liberals are correct, no such translation is possible. We perceive and experience from within our linguistically determined framework. No common or shared experiential ground exists. We can understand a religion only from within its unique conceptual linguistic horizon.

From this basis the post-liberal like Ronald Thiemann, now dean of Harvard's Divinity School, can argue, as he does in his recent book, *Constructing a*

Public Theology, that the distinction between theology and the secular study of religion is "conceptually confused." Thiemann dismisses the possibility of distinguishing theology and religion studies by reference to categories like subjectivity\objectivity, epistemic privilege\methodological neutrality, or advocacy\disinterest. The modern hermeneutical discoveries of the interconnections of knowledge and interest, pre-understanding and subject matter, undercut these differences. Similarly any attempt to ground the study of religion in a common or universal human experience is misguided. Identifications of such proposed core experiences inevitably fall prey to the fallacy of calling universal what is "the structure of a local, historically conditioned, and temporally specific experience. . ." [6]

Thiemann seeks to provide another vision of the religious studies\theological project altogether. We should focus on religions as the practices of communities of faith and the reflective activities appropriate to those practices. We should forget the search for a universal human experience, or some kind of religion behind the religions, and concentrate instead on the "beliefs, rituals, and practices that constitute historical religions. . ." [7]

Citing Clifford Geertz, Thiemann sees religions as a cultural or linguistic framework that shapes the entirety of life and thought. The job of the scholar is to discover patterns inherent in these conceptual structures so we can gain access to the conceptual world where the religious practitioner lives and, with sufficient attention to detail, actually enter the world constructed through these frameworks. For some, this entry is provisional and temporary. For others, it can be an transformative experience shaping their character and identity and providing them a community where the possibilities of the text become realized and actualized in practice.[8]

Given this model, Thiemann holds that the justification for banning theology from the core of critical studies has been eliminated. While arising from deeply held religious convictions, theology is nevertheless a critical, formative, communal and public activity. If indeed the purpose of the general education is, in part, a matter of instilling values and the formation of students' identity, then a truly critical theology is the crucial discipline of the liberal arts. Theology, he suggests should once again become the "center of our common intellectual and spiritual task. . ."[9] in the university.

Taken to its logical conclusion, this sort of approach leads to the advice Stanley Hauerwas gives to those who want to learn what Christianity is really all about:

> . . . I am sometimes confronted by people who are not Christians, but who say they want to know about Christianity. This is a particular occupational hazard for theologians around a university, because it is assumed that we are smart or at least have a Ph.D., or we must really know something about Christianity. After many years of vain attempts to "explain" God as trinity, I now say, "Well, to begin with we Christians have been taught to pray. 'Our Father, who art in heaven. . . .'" I then suggest that a good place to understand what we Christians are about is to join me in prayer.[10]

What is wrong with these approaches? While both may have legitimate application in other contexts, neither the participationalists nor the post-modernist approaches have a place in the secular study of religion. Both depend upon blurring the line between the study and the practice of religion, and both ultimately cross that line. The clearest objection to this blurring is its violation of the Supreme Court ruling of Abington v. Shempp. We who teach and work in state-funded institutions have implicitly agreed to abide by the constitutional mandate to separate church and state. To require students, as part of their course work, to adopt, even temporarily, a stance of belief or faith, is tantamount to using state funding to establish a religious practice. It is simply illegal.

But aside from the law, there are other objections. With both methods, the loaded concept of "entry" into the world of myth or faith implies the potential for exposing students to situations that require them to alter their identity or character in some basic way. In a therapeutic or religious context, such potential is legitimate. However, it is, or at least ought to be, explicitly announced from the outset, often as one of the goals of the practice. Those who choose not to allow themselves to be converted, transformed or healed eliminate themselves from the game.

But in the secular educational context to require such alteration in identity is ultimately coercive. It raises the ugly specter of a theological triumphantalism that has no place in the classroom. We must be sensitive to the fact that to require a Jewish student to enter the world of the Christian believer (or vise versa) in order to complete his requirement for a course of study, may be highly offensive. Similarly to ask a Muslim to enter the world of the Buddhist (or vise versa) may violate deeply held moral principles.

This is clearly in distinction to requiring the students to learn about other religions. Certainly we may require the student to read from the sacred texts of other religious faiths, to discuss their values, beliefs, ideals and practices. But under no circumstances may we require the student to practice, accept or live with another's framework of belief, even temporarily.

So what do to? Must the instructor maintain a stance of strict neutrality? Is real objectivity possible? Could we possibly require such objectivity of students hardly capable yet of sustaining decorum, much less of the sophisticated (and usually artificial) critical discourse devoid of personal investments? No. Then how do we make use of the opportunity in the classroom to encounter real issues of global diversity and plurality, deeply felt ethical and cultural difference, issues of identity and community, the fuller range of human potential, issues of violence and ecstasy, hope and oppression that rise out of this subject?

Several approaches are available. I would like to speak of one, particularly appropriate to the issues of globalization of modern culture: The model of interreligious or interideoloigical dialogue.[11]

Interreligious dialogue proceeds with an invitation for the class to engage in dialogue with each other and with the text for the primary purpose of coming to understand another's point of view. The goal is first mutual understanding rather than objective truth. Putting this in another way, the point of interreligious dialogue is not so much to determine the correctness of the partner's position; rather it is to achieve a fuller understanding of what that position is. This grates against the initial tendency of most students to begin critical attack before reaching or even attempting a full understanding. The notion here is that understanding may be a more cooperative than competitive venture, one requiring a multi-perspectival rather than a mono-perspectival vision.

The interreligious dialogue approach differs then from Socratic debate in that no partner in the dialogue is the central focus of the discourse and no framework of understanding or faith is predominant or privileged. While each participant in the dialogue ends up being a teacher, no one who participates only as a teacher can fulfil the basic purpose of this kind of discourse. It is the gathering of a community of seekers, each dedicated to learning from and about the other partner, each willing to speak from his own point of view.

The notion that the text itself can be a dialogue partner may be somewhat strange to the student since the text cannot directly respond to a student's interrogation. Yet metaphorically, students can be taught a new and hopefully exciting prospect of active engagement with the words on the pages. This active engagement involves a use of the imagination, a creative attempt to see the world as the author or audience might see it, or at least to perceive how that community might want the world to be.

But a more direct kind of engagement is possible. The advantage to this kind of religious instruction is that the texts often are able to come alive in the guise of members of the community of faith formed around the text. Students can not only read the Koran (or the Vedas, or the Buddhist Sutras), they can speak with others who see the world from the Muslim (Hindu, Buddhist) point of view; they can even visit others engaging in religious practice by attending religious services. Or the member of the faith community can visit the classroom. Whether the "other" is a cleric, a layperson, or another student in the class depends, of course, on available resources. But the potential is that each can encounter the world of the text in a more direct way and learn correspondingly more.

Certain ground rules are necessary to make this kind of dialogue productive and effective. The invitation is for both the student, the instructor, and guests to speak to the class from the position of their own faith tradition. This means each participant must define his own faith and his own position within that stance. Similarly, a text must be to allow it to speak for itself, without a preliminary gloss of secondary commentary or external interpretation.

One of the many roles of the instructor is to produce a classroom atmosphere of trust and safely for all participants. One effective way of achieving this is for him or her to initiate and model an openly honest, openly self-reflective and self-critical stance. An expression of doubts about my own position (whether or not it is religious) can allow others to be equally open about their own doubts and questions. Another device is to insist that in the dialogue process, ideals are compared with ideals and practice with practice. It does no good for one partner to regale the other on his violent and spotted history while claiming a moral high ground that wars fought in the name of his own faith were "mistakes."

My own strategic position is to assign the class the task of searching for common themes, common problems, and the common humanity of dialogue partners. My guiding presupposition is that we find these commonalities in human suffering:

That we are all embodied
That we all suffer pain
That we all grow older
That we all die.

My contention is that the sacred texts and faith traditions represent a response to these fundamental aspects of the human condition, a response we can all come to appreciate with sufficient good will, honesty and human regard.

One problem with this model in the classroom is that students are often insufficiently knowledgeable about their own tradition to accurately reflect that tradition's response to the many issues that arise through dialogue. The model works well with "experts" in the faith. But with novices, misinformation can easily arise.

This brings up other roles of the instructor in the context of the classroom's employment of interreligious dialogue. Certainly the instructor must be a dialogue partner, following the same guidelines as students and guests But, with adequate training and background study, the instructor can also act as intermediator and translator. As intermediator, he or she can insist that the rules of dialogue discourse are maintained. This sort of dialogue is often difficult to maintain. People tend to become passionately involved, especially when they begin to see themselves through the eyes of a member of another community of faith, and in this involvement they lose touch with the ground rules. The instructor can provide gentle reminders of the boundaries when they are transgressed.

As translator, especially when difficult primary sacred texts are involved, the instructor can invite, suggest and stimulate interpretations that might be lost with traditional or conventional approaches. This usually involves a process of speaking for the text, bringing the class back to details or connotations that tend to be overlooked or ignored, pointing out thematic commonalities or irregularities. Once again the more accomplished the scholar, the easier this role will be.

Interreligious dialogue is a method of discourse that allows the dialogue partners to retain their personal framework of belief, while at the same time encountering the other with an openness to the critical examination of issues and ideas in conflict an opposition. Thus the dialogical model does not pretend objectivity or neutrality on anyone's part. It does, however, assume and depend on the possibility of communication among frameworks of discourse, across cultural, historical and linguistic boundaries. It also assumes the possibility of coming to understand another point of view without conversion to their faith or entry into their community of belief. Finally, it requires and possibly promotes the moral and intellectual integrity of the partners as engaged in an exploratory and scholarly enterprise of mutual understanding.

Endnotes

1. For a discussion of these issues see Nicholas Piediscalzi and William E. Collie's "Legal, Theoretical, and Practical Issues," in *Teaching About Religion in Public Schools*, edited by Nicholas Piediscalzi and William E. Collie (Niles, Illinois: Argue Communications, 1977), pp.13-24.

2. William Cantwell Smith, "Methodology and the Study of Religion: Some Misgivings" in *Methodology and the Study of Religion*, edited by Robert D. Baird (Chico, California: New Horizons Press, 1975), p. 2.

3. The literature is overwhelming. A few helpful introductions: Paul Ricoeur, *The Conflict of Interpretations*, edited by Don Ihde (Evanston: Northwestern University Press, 1974); Edgar V. McKnight, *The Bible and the Reader: An Introduction to Literary Criticism*, (Philadelphia: Fortress Press, 1985); Michael Payne, "Canon: New Testament to Derrida," *College Literature* Special Issue 18.2 (June 1991):5-21; James L. Resseguie, "Reader-Response Criticism and the Synoptic Gospels," *Journal of the American Academy of Religion* Vol. LII, no. 2:306-324; Hans H. Penner, "Creating a Brahman: A Structural Approach to Religion," *Methodological Issues in Religious Studies*, edited by Robert D. Baird (Chico, California: New Horizons Press, 1975), pp. 49-66; Jonathan Z. Smith, "Narratives into Problems": The College Introductory Course and the Study of Religion," *Journal of the American Academy of Religion*, Vol. LVI, no. 4:727-739.

4. See Samuel Laeuchli, *Das Spiel vor dem Dunklen Gott; Mimesis--ein Beitrag zur Entwicklung des Bibliodramas* (Germany: Neukirchener Verlag, 1987); Antje Kiehn, *Bibliodrama* (Stuttgart: Kreuz Verlag, 1987); Jean Houston, *Life Force: The Psycho-Historical Recovery of the Self* (New York: Dell Publishing Co., 1980); Robert Bly, *Iron John: A Book About Men* (New York: Vintage Books, 1992).

5. Charles Lindbeck, *The Nature of Doctrine: Religion and Theology in a Postliberal Age* (Philadelphia: Westminster Press, 1984), p. 37.

6. Ronald F. Thiemann, *Constructing a Public Theology: The Church in a Pluralistic Culture* (Louisville, Kentucky: Westminster\John Knox Press, 1991)

7. Ibid. p. 153.

8. Ibid. p. 155.

9. Ibid. p. 167.

10. Stanley Hauerwas, "Discipleship as a Craft, Church as a Disciplined Community. "*The Christian Century* (October 2, 1991):884.

11. The model I am developing here, while based on the principles of Leonard Swidler's "Dialogue Decalogue," *The Drew Gateway* Vol. 58, No. 3 (Spring 1989):5-9, substantially modifies that method. Swidler assumes, in large part, a sophistication in the participants often lacking in the college undergraduate, at least in the core courses.

TEAM TEACHING:
ADVENTURE IN PEDAGOGY

Virginia Hale
Candy Klaschus

Team teaching is a remarkable adventure in pedagogy. For a team-taught course to work effectively both for faculty and students, certain conditions need to be present and some ground rules must be established. Key strategies learned in five years of team teaching an interdisciplinary course include: divide the class as evenly as possible among the team members; vary the pedagogical styles; be prepared to not cover your material in the depth you would in a class taught alone; find colleagues who like and respect one another; don't do it if you don't enjoy it. We will use examples from two team-taught courses to show what we mean.

Voices of Experience: Part I

All right, I confess; I am a collaborator. What's more I've got a record! I have been team teaching in various courses for more years than I like to reflect upon.

The fact is, I've never met a course that could not be team-taught. But each course requires its own distinctive approach to team teaching and carries its own challenges. What I plan to say here will outline some of the common problems I've observed in team teaching and some of the special joys that come from a collaboration well-done. While my own experience has included team teaching introductory English courses, English as a Second Language, an honors course on King Arthur, and interdisciplinary courses exploring the Medieval Mind and Literature and Films of Other Cultures, it is the latter on which I will base most of the observations made here.

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To begin with, the team should consist of people who have a series of qualities. They should like and respect each other. It will not do to have one member of the team presuming he or she is vastly superior to the others on the team. Such an arrangement caused one of my colleagues on a three-member team to describe his

experience as being "one of two cabooses pulled by a steam engine." Nor will it work if team members respect each others' abilities but don't have a good personal rapport.

Second, efforts should be made to share the responsibilities of the team equally. Time is a real matter for concern here. Call it ego if you will, but most teachers want their share of the podium and might resent it if Prof. A goes on for long enough to cut Prof. B's contribution in half. No doubt the contributions of each one are vital and might deserve more time than there is to go around, but students are keenly aware of internal strife in a team and often they feel threatened by it. It is therefore vital that time be divided thoughtfully in advance.

One model for organizing the team-taught course is simply to take turns: you lecture this week and I'll lecture next week. Or, you conduct the discussion of this unit and I'll do the next one. Or, next Monday you take 30 minutes and I'll take 30 minutes. Any of these models will work so long as no member of the team is inflexible. If the teaching goes well, in my experience, the students will become engaged and ask questions or add insights for which no precise time allotments can be gauged. Sometimes this means Prof. A will tread on the allotted time of Prof. B. The team members must be sufficiently accommodating to adjust to that, either by postponing their prepared material for the next class meeting, or by simply never presenting it in the classroom. If Prof. B's material is deemed indispensable to the students, sometimes alternate strategies for getting it to them--in written form or through an exercise of some sort--might be an option. The dilemma does not occur very often in a well-organized course, simply because all team members will have agreed on what are the priority items and will themselves order the presentations to insure that core materials are delivered--either by scheduling their presentation at the beginning of class, by repeating the materials in several ways and often; or by cutting off their own part of the discussion indicating that it can be continued after class or in section meetings. This way they let the students know that they will not have to drop an interesting issue, but that there is something else commanding their attention at that time.

There is no room for the fragile ego in a team teaching situation. My favorite team teaching experiences have occurred when members of the team disagree on an issue or the interpretation of a point. I think it especially good for the students if such disagreements occur in front of them--and even better when they take part in the melee. For too many students, particularly when they are freshmen, teaching has meant telling students the right answers and allowing for little if any questioning of the authority figure. When two or more such authorities demonstrate that genuine differences can occur and, even more, that faculty are willing to risk and even welcome challenge in order to explore their views, an important learning objective for the team-taught course is accomplished.

Let me turn briefly to a model with which I have been engaged for five years now. I am part of a team teaching an interdisciplinary course called Literature and Films of Other Cultures. My teammates include a film theorist and an anthropologist; I am responsible for literary study. We prepare for each semester by establishing first the cultures we want to consider. Generally, since we work with six cultures each term, each one of us gets to choose his/her two favorites. More than likely the favored status is the result of our own particular enthusiasm for the material we can offer in our discipline. Nonetheless, each of us will be responsible for some contribution to the presentation of all six cultures. Because we follow the lecture/section model--meeting together in a large group one day a week and breaking off into three separate smaller groups on another day--all of us must be capable of covering all aspects of the course, even those in which our own discipline is not central. It stands to reason that, if we are expecting the students to integrate several disciplines and find common threads, the faculty should be able to model the behavior expected by demonstrating their own control of the various materials in the course. Some would see this as a pitfall in team teaching. And there is simply no denying that team teaching requires more time and effort than teaching alone. But for me this is also one of the great joys of team teaching. I get to learn new ways of looking at things and I am constantly invited to re-examine my own approach and my own assumptions about literature, film and culture.

As I write this, the team is preparing a unit on Japan. Students will have read a number of haiku and tanka, and I will be offering some background on the importance of those ageless forms. Our film theorist will be discussing an article on haiku and film editing which the students (we devoutly hope) will have read in preparation for the class, and he will illustrate his points with appropriate film clips. Our anthropologist will raise some issues about Japanese culture which focus on philosophies of work and the impact of social stratification on the production of Japanese poetry and art. Finally, the students will have some time to create haiku of their own, an exercise which will be carried over into the weekly section meeting.

This model works fairly well for us. But on another occasion all of us will take turns in one discipline. For instance, we will take a story like Mishima's

Patriotism and offer differing interpretations of it: the literature specialist concentrating on point of view and character, the film theorist looking at the documentary introduction and the visual imagery, and the anthropologist stressing evidence in the story of social stratification and the cultural concept of ritual suicide. With *Patriotism* we have only mild disagreements. On other occasions, as with the Brazilian short story *The New Kingdom* by Nila Pinon, our readings are very disparate. And the dynamic of the interchange of disparate opinions invigorates both the team and the class. At best it establishes a pattern for the students to assert their own views and to strive to support those views as solidly as possible. At worst it makes students uneasy with simple explanations.

What I have described constitutes one of the joys of team teaching. There are many (and one might include the current opportunity to share our experience in a conference such as this one devoted to exploring pedagogy) but most are centered on learning. Team members are students of one another. In a multi-disciplinary setting and in a diverse university such as ours, we have the chance to draw on a wide range of expertise and to introduce students to the wonders of the synthesis of knowledge while we experience it ourselves. In short, we're having fun, the students see that, they join in, and the adventure begins.

Voices of Experience: Part II

A team of professors who share an interest in Native American culture began planning a course in the fall of 1989; "Native American Cultures" was first offered in Spring 1991. The course is given every term, so this spring we are teaching it for the third time. Although we usually have a team of three, this term we have only two members. "Native American Cultures" is on a Tuesday-Thursday schedule, with the large group of about 75 meeting together on Tuesdays for lectures, and small groups of 25 being with individual teachers for discussion on Thursdays.

As every teacher knows, no course is ever perfect--endless tinkering, if not outright major revision--is necessary. As part of our continuing effort to make "Native American Cultures" more interdisciplinary, the team this semester developed a two-week presentation on the Pueblo Indians. What follows is a summary of that presentation.

Most archaeologists agree that the present-day Pueblo are descendants of the ancient Anasazi, whose territory went as far west as Nevada, south to central New Mexico and Arizona, and north to Colorado and Utah, so we begin with a lecture on Pueblo culture and then move back in time to study the Anasazi ruins of Chaco Canyon. Although lecturing is not always the best way to elicit students' active participation, we try to keep the delivery informal, encouraging students to ask questions and make comments. Since most of the students know little about Pueblo culture, they are quite engaged by the information, especially the explanation of the clan structures, which are key to Pueblo life and differ greatly from the structure of the American family. The Pueblo--and most probably the Anasazi before them--have a matrilineal structure in which the women have a great deal of power: married couples live with the wife's mother, who owns the family's personal property. Boy children are trained by the mother's brothers, not the biological father. Pueblo men are responsible for the tribe's ceremonial and religious life, centered around the kiva, a structure we discuss at length later in the presentation. Religion is central to the Pueblo and cannot be separated from the activities of daily life; even such apparently simple tasks such as waking up, grinding corn, or weaving have rituals attached. The students find this lack of separation puzzling and intriguing and are always eager to learn more about Native American spirituality.

After we lay the groundwork we begin showing slides; one team member runs the projector and identifies the images, but both (or all) of the members make comments, so it is more like a discussion than a lecture. We again encourage students to ask questions or comment at any time (making sure the lights are bright enough so we can see raised hands and so the students can take notes; sometimes the smallest details make a big difference). We move from pictures of present-day pueblos in Arizona and New Mexico back in time to the Anasazi ruins at Chaco Canyon, in northwestern New Mexico, built from about A.D. 700 to 1300. More questions than answers exist about the Anasazi--a Navajo word meaning "alien ancient enemies" or "enemy ancestors"--even though excavators and archaeologists have been studying Chaco and other Anasazi sites since the late nineteenth century. At this point, we give a brief history of the work that has been done by archaeologists in Chaco and explain a bit about the techniques archaeologists use to uncover the secrets of past civilizations.

As we display images of Pueblo Bonito, the largest structure in Chaco Canyon, we talk about building techniques, for the Chacoans were incredible stonemasons. Pueblo Bonito is one of at least nine "Great Houses" in the canyon: structures containing hundreds of rooms, kivas, with plazas, towers, and terraces that archaeologists speculate were probably designed by a "central committee" advised by an architect. Massive labor was required to build these structures, as well as huge amounts of material. A typical room probably required 45,000 kilograms of stone, 15,000 kilograms of clay, and 4,100 liters of water. Since roofs were timbered with as many as 40 beams, Chacoan builders had to go as far as 60 kilometers to get fir or pine logs; it is probable that a pine forest had once been closer, but reckless felling of trees brought about erosion and denuded the area and lowered the water table.

Flash floods were common through the canyon, but the Anasazi used those occasions to float in trees that had been cut in forests long distances away from the canyon (Nabokov 361). Thousands of people lived in these Great Houses--it was not until the 1870s that structures equal in size were built in the United States (Canby 562).

From the specifics of Pueblo Bonito, we move on to asking questions about the way space functions in a culture. How do we use buildings? Can buildings be "read" as "texts" to give us clues about a culture? If we were to begin "reading" the buildings we use daily, as well as those such as the White House that are symbolic as well as functional structures, what might we learn about the American culture? Do the spaces we inhabit, work, and play in shape our perceptions?

Such questions help us move into the next area of study: the Pueblo kiva, which probably developed from domestic pit houses built between A.D. 500 and 700. By the twelfth century, the kiva had become a round structure with a bench around the interior and decorated walls, sunk fairly deeply into the ground. Entry is through an opening in the log roof and down a ladder; each kiva has a firepit, ventilator shaft, and a small hole in the ground called a sipapu, which connects the people with the spirits. Kivas are used for both social and sacred functions, and the men are in charge of them. As we tell about some of the ceremonies performed in kivas, one of the team members reads aloud a portion of "Sayatasha's Night Chant," a long Zuni Pueblo poem that is recited yearly in a ceremony celebrating the winter solstice. We also talk about the importance of the kachinas, spirits who watch over the Pueblo, represented in ceremonies by costumed men, and by dolls. A recording of a Pueblo song that accompanies a sacred dance gives students a chance to hear the Pueblo language and music.

Anasazi builders were careful to align their structures so the solstices could be noted through certain openings. The Chacoans also had a magnificent system for keeping track of seasonal cycles in the Sun Dagger, a group of rocks built on top of Fajada Butte at the south entrance to Chaco Canyon. After we have shown the Sun Dagger and explained how the marking system works, a team member reads a Zuni poem, "Presenting an Infant to the Sun." We begin discussing the place of ritual in the lives of Native Americans and ask students to start thinking about the functions of ritual: can they think of any ceremonies in their lives as being rituals? This is a discussion that continues throughout the term.

We move from architecture to the material culture and trading practices of the Chacoans. Patterns on pottery demonstrate how indigenous groups borrowed designs from one another, often as they traded; Chaco Canyon was an important trading center, and pottery is still a significant Pueblo art. A brief explanation of pot making (some of the students are working on ceramic projects for the class) and a discussion of the meanings of the designs wraps up our lesson. We close with a poem by contemporary Acoma Pueblo poet Simon Ortiz, "Washyuma Motor Hotel":

> Beneath the cement foundations
> of the motel, the ancient spirits
> of the people conspire sacred tricks.
> They tell stories and jokes and laugh
> and laugh.
>
> The American passersby
> get out of their hot, stuffy cars
> at evening, pay their money wordlessly,
> and fall asleep without benefit of dreams.
> The next morning, they get up,
> dress automatically, brush their teeth,
> get in their cars and drive away.
> They haven't noticed that the cement
> foundations of the motor hotel
> are crumbling, bit by bit.
>
> The ancient spirits tell stories
> and jokes and laugh and laugh (Velie 304).

We hope that the students come away from the presentations with more than facts and figures; we want them to understand, first of all, the complexity and beauty of a culture different from their own and to see that America's indigenous groups were sophisticated people. We also want students to begin thinking about how things in life usually taken for granted, such as buildings, do affect our lifestyles and philosophies. Finally, we hope they start to see that the Pueblo, and most Native American cultures, do not separate the parts of their lives: everything is part of a whole.

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TOM ROBBINS' *EVEN COWGIRLS GET THE BLUES*: AN INVITATION TO INTERDISCIPLINARY STUDY THROUGH THE MODERN NOVEL

Brenda Weber Ijams

Even Cowgirls Get the Blues is largely an instructive manual for twentieth-century individuals, providing them with essential tools for a psychic evolution, one of thought rather than form. The tools and special language Robbins provides assist in the effort to develop a perspective of natural phenomena unbiased by logic, thereby forming an authentic and cooperative relationship with nature. Throughout the novel, Robbins illustrates scenes which demonstrate the potency and accuracy of his philosophy in both a physical and an abstract context. His basic premises on the composition of the universe serve to elucidate and are affirmed by the new physics and Tantratic Buddhism and as such represent an excellent resource for interdisciplinary study.

In his 1976 novel *Even Cowgirls Get the Blues*, Tom Robbins integrates ideas of science and philosophy and in that synthesis projects a singular vision of the value of the interdisciplinary interpretation of meaning. Robbins' novel defines truth as existing separate from logic and restrictions of language and invites the reader to contemplate meaning from diverse referents. For Robbins this meaning is characterized by an absence of restriction: "Definitions are limiting. Limitations are deadening. To limit oneself is a kind of suicide. To limit another is a kind of murder" (Robbins, 333). With opposition to limitation as a central theme, Robbins generates a serious discourse on the context of metaphysical reality and perception. To Robbins, twentieth-century humanity is in a precarious position. With a penchant for logic and rationality, people choose to create systems and methods of thought which are ordered, mechanical, and streamlined but sterile and bereft of emotional character. Through these routine logical methods and behaviors, people isolate themselves from their mythical and matriarchal past, living a life of regimented competitive technology in a world better suited to harmony and natural cooperation.

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In doing so, people violate the preexisting balance, or natural harmony, of their physical and emotional environment, creating instead a wholly understandable, wholly rational, and wholly artificial construct. People, then, create a perspective of the world which is static and rationally stable, in opposition to evidence provided by all life experience.

Robbins speaks of an image of the world based on the human need to understand rather than on an image of the world that is a consistent and accurate reflection of physical phenomenon. This rational image is generated to philosophically counter human fear of unpredictability and the unknown. In Robbins' view this extremely rational vision of the world and the metaphysical perspective it fosters create only an **illusion**, a facade of order not true order--at least not true stability, which Robbins argues is a flexible, dynamic and non-quantifiable entity. He emphasizes that people's rigid attempts to impose order in life are futile gestures that actually succeed in breeding destructive and repressive disorder. Robbins encourages his readers to rediscover ancient pre-technological truths, a task only possible when we no longer have complacent minds--minds grown used to being given answers, to being entertained, to being disregarded. For Robbins, humanity's most lethal enemy is a dull mind.

Though *Even Cowgirls Get the Blues* is not a traditionally didactic novel, Robbins' messages to his readers are clear: Don't allow your mind to become dull; welcome failure and obstacle; see that reality only exists in the context of interpretation; accept the idea that meaning is not static but differs with perception; take the risk involved in being exposed to mystery; find ultimate truth through ultimate abstraction. Robbins leads his reader from the specific, directing that reader to go past his concept of self and move toward a transcended truth. Robbins urges a meditative response to the modern world that will lift its collective conscious from the rational and mechanistic to the mysterious and ethereal. Joseph Campbell, a noted scholar of mythology and an influence on Robbins, similarly emphasizes this fundamental need for the human individual to find enlightenment through transcendence from the divided construct. Campbell says:

> . . . the ultimate mystical goal is to be united with one's god. With that, duality is transcended and forms disappear. There is nobody there, no god, no you. Your mind, going past all concepts, has dissolved in identification with the ground of your own being, because that to which the metaphorical image of your god refers is the ultimate mystery of your own being, which is the mystery of the being of the world as well (Campbell, 211).

To elucidate his metaphysical theory, Robbins identifies three key words, which serve as the conceptual foundation for his discussion: **Poetry, Magic,** and **Grace**. These three terms represent the foundation of the novel's philosophy. Due to space restrictions, I will not elaborate here, but the basic meaning in Robbins' lexicon is: the founding ideas of a paradigm must be intensified ideas (poetry); they must be open to risk (magic); and they must be unlimited in potential and possibility (grace).

In his discussion of the conceptual meaning of poetry, magic and grace, Robbins emphasizes the need for a steady naturalistic base. Robbins discusses a nature which is the unlimited essence of existence; it includes space, time, paradox, mystery, and meaning as well as humanity and sexuality. Nature is the model for all things, upon the Earth and beyond. Man has access to that "something beyond" when he is willing to accept and explore the unlimited quality of nature. As Bonanza Jellybean, a cowgirl in the novel, remarks to Sissy, "The Chink says that these plains exist on the edge of meaning, at a zone between meaning and something so great it's got no meaning" (Robbins, 152). Robbins is laying the conceptual foundation for a nature so great that it exceeds the intellect's capacity to comprehend and assign meaning.

Nature, then, is a transitional entity which both divides and encompasses aspects of physicality and mysticality. The mystical aspects of nature are so great that they possess no meaning, an idea that is rationally contradictory. Here is Robbins' first lesson about nature. Nature is whole through the balance of its contradictions. "There is order in Nature, but there is also disorder. It is the balance of tensions between the order and the disorder, the natural laws and the natural randomness, that keeps it from completely collapsing" (Robbins, 205). Nature does not make logical sense; it does not need to make logical sense, and furthermore, nature is meaningless in an intellectual context. People make their fatal mistake when they move away from the harmony of nature toward an exclusionary rationality. Human ideas enforce logic. None of nature, in its life, death, instinct, sex, or balance, is logical. Logic seeks to destroy balance by asserting that only the way of empirical evidence is valid. Conversely, nature espouses all ways, all theories, all approaches, especially those which don't make analytical sense because they interact on a level beyond rationality.

Tom Robbins describes nature as unnamed and unnameable, a force that is most potent when clouded in mystery. Martin Buber, 20th century theologian and philosopher, addresses this same unnamed forced in his work *I and Thou*. Buber writes of the levels of relationships humans establish, the most highest and most mysterious being between the I and the Thou. When an I-Thou relationship is established, it transcends the need to process and prefers rather to relate. Buber's Thou, like nature, cannot be approached or understood through logic. To define the Thou is to limit and, hence, to alter the Thou's basic nature, making it instead an It.

Buber says, "Only silence before the *Thou*--silence of all tongues, silent patience in the undivided word that precedes the formed and vocal response--leaves the *Thou* free, and permits man to take his stand with it in the reserve where the spirit is not manifest, but is. Every response binds up the *Thou* in the world of It" (Buber, 27). Buber asserts that if humans wish to interact in non-duality, which Tom Robbins has identified as the ultimate goal of meditation, they are called upon to relate to the Thou on a transformed level. Buber states that people can and must strive to relate in this transformed manner saying:

> The life of a human being. . .does not consist merely of activities that have something for their object. I perceive something. I feel something. I imagine something. I want something. I sense something. I think something. The life of a human being does not consist merely of all this and its like. All this and its like is the basis of the realm of It. But the realm of You has another basis (Buber, 48).

To release ourselves from the I-It bond of defined relationships, Buber says, "What has to be given up is not the I but that false drive for self-affirmation which impels man to fall from the unreliable, unsolid, unlasting, unpredictable, dangerous world of relations given up is not the I but that false drive for self-affirmation which impels man into the having of things" (Buber, 52). These ideas lay the framework for interdisciplinary study, as they illustrate the value of unbounded inquiry. It is precisely these unreliable, unpredictable and dangerous aspects of nature which Robbins so strongly urges his reader to welcome. ". . .the vagrancies and violence of nature must be brought back into the foreground of social and political consciousness; they have got to be embraced in any meaningful psychic renewal" (Robbins, 207). Buber's idea of connection with a non-defined source parallels Robbins' idea of interaction with the untamed essence of nature.

John Fowles, also a contemporary writer, speaks too of the essence of nature. In *The Tree* Fowles says, "It, this namelessness, is beyond our science and our arts because its secret is being, not saying. Its greatest value to us is that it cannot be reproduced, that this being can be apprehended only by other present beings, only by the living senses and consciousness. All experience of it through surrogate and replica, through selected image, gardened word, through other eyes and minds, betrays or banishes its reality" (Fowles, 90). Like Robbins and Buber, John Fowles articulates the need to accept nature's ambiguous non-rational lessons: "Trying to capture nature verbally exiles me from what I most need to know" (Fowles, 32). He adds, ". . .In nine cases out of ten what natural knowledge and imagination cannot supply is in any case precisely what needs to be left out" (Fowles, 45). Fowles also believes that society has become hostile to nature due to rationally minded people's inability to accept nonproductive or even paradoxical givens. "We shall never fully understand nature or ourselves, and certainly never respect it, until we disassociate the wild from the notion of usability--however innocent and harmless the use. For it is the general uselessness of so much of nature that lies at the root of our ancient hostility and indifference to it" (Fowles, 32). If nature is the paradigm for all structures and philosophies in the universe, and if Robbins, Fowles and Buber are right that nature is at its essence useless, devoid of utility, the error comes in an emphasis on function. Such an idea forces one to re-evaluate judgments of the terms use and useless and to scrutinize the bias for function. Tom Robbins emphasizes this nonproductive assessment of nature. The reader must see that understanding, and not necessarily cognitive awareness, is dependent on an holistic interpretation beyond use or uselessness and that the concept of nature penetrates every aspect of the universe.

Much of *Even Cowgirls Get the Blues* relies on a new physics interpretation of the workings and essence of nature. In approaching the new physics, one must realize that this is a science which has come of age in the 20th century, and, ironically, finds itself in tandem with the philosophies of mystic cults and ancient religions. Fritjof Capra, a Ph.D. in theoretical high-energy physics, speaks of this phenomenon in his book *The Tao of Physics* saying that the understanding of modern physics and the views of Eastern mysticism now appear as one essential component of a much larger cultural transformation. This new understanding of the interrelation of concepts is leading to the emergence of a new vision of reality that will require a fundamental change in our thoughts, perceptions, and values. It is precisely this fundamental change which Robbins inspires through his novel. Since the advent of Albert Einstein's theories of relativity presented in 1905, the entire universal perspective has been drastically and irreparably altered. As George Gamow, an American theoretical physicist, has said,

> . . . it became clear that a number of results, obtained by most refined methods of experimental physics, led to clear contradictions if interpreted in the classical frame of space and time. Albert Einstein then arrived upon the revolutionary idea that there are hardly any reasons, except those of tradition, for considering the classical notions concerning space and time as absolutely true, and that they could and should be changed to fit our new and more refined experience (Gamow, 10).

Albert Einstein launched a profound shift from the causal universe paradigm (Newtonian) to a relativistic universe paradigm. Newtonian physics received another debilitating blow through developments in atomic physics. In the 1920's Ernest Rutherford conducted experiments showing:

> Atoms, instead of being hard and indestructible, consisted of vast regions of space in which extremely small particles moved. . .these particles were nothing like the solid objects of classical physics. The subatomic units of matter are very abstract entities which have a dual

> aspect. Depending on how we look at them, they appear sometimes as particles, sometimes as waves (Gamow, 15).

This concept of the reality of matter showed that, "at the subatomic level, matter does not exist with certainty at definite times and indefinite ways, but rather shows 'tendencies to occur'"(Capra, 56). Furthermore, when the smallest know particles were divided, they split into equal portions of energy rather than into the indestructible units Newton had hypothesized. Capra describes this process of particle division and its unexpected results:

> Before relativistic particle physics, the constituents of matter had always been considered as being either elementary units which were indestructible and unchangeable, or as composite objects which could be broken up into their constituent parts; and the basic questions was whether one would finally arrive at some smallest indivisible unit. . .the whole question of the division of matter appeared in a new light. . .we can divide matter again and again, but we never obtain smaller pieces because we just create particles out of the energy involved in the process. The subatomic particles are thus destructible and indestructible at the same time (Capra, 55).

Quantum theory, the study of the waved characteristics of light, thus demolished the classical concepts of solid objects and of strictly deterministic laws of nature. In their places stand the relativity concepts behind the new physics which state that nature, and its individual constituents, can no longer be perceived as static objects. Nature must instead be perceived as a dynamic **process** involving and composed of energy. Therefore, all of matter, including the living being, is not a compilation of atomic building blocks but is instead a composite of cosmic energy. There is no basic indestructible building block for all of life and universal structure, as hypothesized by Newton, but the elementary unit of life and universal structure is energy.

Elementary to Robbins' admonition that one transcend the complacent mind is the realization of the role of perception in interpreting the shape of one's reality. Robbins says, "Einstein had observed motion and learned that space and time are relative; Sissy had committed herself to motion and learned that one could alter reality by one's perception of it" (Robbins, 71). And again, ". . . it depends on how you look at it, that **everything, always,** depends on how it is perceived, and that the perceiver has the ability to adjust his perceptions" (Robbins, 265). Robbins asserts here that perception is the single-most important factor in determining reality, regardless of discipline or philosophy. The concept of relativity forever negated the idea that a scientist could be an objective observer. Instead the scientist "becomes involved in the world he observes to such an extent that he influences the properties of the observed projects" (Wolf, 114). Heisenberg said, "What we observe is not nature itself, but nature exposed to our method of questioning" (Wolf, 115). This, in turn, led scientists and philosophers to realize that, in the words of Wolf:

> . . . what we think may physically influence what we observe . . . . In fact, our minds may enter into nature in a way we had not imagined possible. The thought that atoms may not exist without the observers of atoms is, to me, a very exciting thought . . . . Perhaps much of what is taken to be real is mainly determined by thought. Perhaps the appearance of the physical world is magical because the orderly processes of science fail to take the observer into account. The order of the universe may be the order of our minds (Wolf, 6).

These idea's of Wolf's challenge the existing paradigm which scientists and society have grown to rely on--the idea that science is always impartial and impersonal and because of this distance from bias distortion, accurate. Wolf states that human thought and perception, as Robbins states, is an integral influence in our understanding and observation of the physical world. Fritjof Capra further emphasizes the invalidity of the classical idea of an objectively describable nature: "The human observer constitutes the final link in the chain of observational processes, and the properties of any atomic object can be understood only in terms of the object's interaction with the observer" (Capra, 57). The content of science, then, is dependent on human perception for its shape.

In *Cowgirls* Robbins addresses this phenomenon of perception, saying: "One has not only an ability to perceive the world but an ability to alter his perception of it, or, more simply, one can change things by the manner in which one looks at them" (Robbins, 72). Theories of new physics show that this is not trite and unrealistic optimism; perception determines the shape of all physical reality. Robbins' quest is to demonstrate that if perception is a primary determinate in understanding the physicality of the universe, then perception should also be a primary determinate in understanding the metaphysicality of the universe. There can now be no precise definitions of time, space, or stability in the physical word; therefore, in the world of common meaning, in simply living life, we should not limit ourselves with false and severely defined ideas of time, space, and stability.

Robbins urges the reader to understand that devices do not possess definitive value. He address this point in relation to books and clocks:

> . . . we have come to expect, for better or worse, some sort of chronological order in the books we read, for it is the function of literature to provide what life does not.
>
> . . . .
>
> A book no more contains reality than a clock contains time. A book may measure so-called reality as a clock measures so-called time; a book may

> create an illusion of reality as a clock creates an illusion of time; a book may be real, just as a clock is real (both more real, perhaps, than those ideas to which they allude); but let's not kid ourselves--all a clock contains is wheels and springs and all a book contains is sentences (Robbins, 106-107).

In effect Robbins is saying that we chose to apply meaning to what is conveyed through devices such as a book or a clock, but we fail to understand that this derived meaning is arbitrary and artificial.

Robbins writes that we, contemporary American humans, perceive time as a restraint. As a result we deny ourselves the freedom of creating a significant reality. Robbins speaks of one of the characters in the book, a psychologist who sometimes doubles as the narrator, "Dr. Robbins had searched to find at least one fundamental truth about the psyche, and the closest he had come to a fundamental was the discovery that most psychological--and, therefore, social, political, and spiritual--problems can be linked to pressures exerted by time. Or, more precisely, civilized man's idea of time" (Robbins, 203). Robbins believes that time prevents us from living authentically because we are continually ruled by the idea that time is running out. As a culture, we believe that time truly exists in pre-packaged increments of seconds, minutes, hours, days, weeks, etc. Robbins states that the perception of time in this manner is not only false but destructive. He differentiates between two types of time, pendulum time and whole time:

> Pendulum time is orderly time, the time of a lawfully uniform universe, the time of cyclic synthesis. That's okay as far as it goes. But pendulum time is not the whole time. Pendulum time doesn't relate to trillions of the moves and acts of existence. Life is both cyclic and arbitrary, but pendulum time relates only to the part that's cyclic . . . a lot of our experience occurs outside of, or relates only artificially to, pendulum time. We still envision time only in pendulum terms, in terms of continuous compulsory rotations (Robbins, 209-210).

Robbins' idea of whole time, or time as it freely flows through the universe, comes through his character the Chink's clockworks. The Chink, a combination shaman-guru-pervert, views life as a "dynamic network of interchanges and exchanges, spreading in all directions at once. And it's all held together by the tension between opposites" (Robbins, 205). This tension between opposites pre-figures ideas of Eastern philosophy, most specifically the yin/yang, which also figure prominently in Robbins' novel but are not discussed within this article.

Tom Robbins also discusses stability in the context of the new physics. A Newtonian idea of stability includes a belief in a universe that is eternal and never-changing. A person searching for stability in a Newtonian world would do so through strict regimentation and reliance on a system of order. Robbins claims that man's bias for order leads not to stability but to instability:

> He (man) not only refuses to respect or even accept the disorder in Nature, in life; he shuns it, rages again it, attacks it with orderly programs. And in doing so he perpetuates instability . . . worshiping order and hating disorder automatically shoves great portions of Nature and life into a hateful category (Robbins, 207-208).

Robbins can be no clearer. Denial of the inherent disorder of nature yields an unhealthy instability. We try to force events into a context which is ordered and stable, but we achieve disharmony and gross instability. Robbins asserts that disorder is inherent in stability. "*Civilized* man doesn't understand stability; He's confused it with rigidity" (Robbins, 207-208).

In traditional scientific thought the world's existence and operation could be defined in terms of orderly exactitude. It is the new physics which have demonstrated that as we penetrate deeper and deeper into nature, we have to abandon more and more of the images and concepts of traditional thinking. It has become increasingly apparent to scientists that we can "no longer rely with absolute certainty on logic and common sense . . . . The atomic and subatomic world itself lies beyond our sensory perception" (Capra, 38).

We begin to see, then, that Robbins' idea of time-space and stability are reinforced through twentieth-century advances in physics. These new advances have made it imperative that cause/effect relationships, time, space, and stability be reexamined and understood anew. Twentieth-century man must learn to acquaint himself with a fluctuating reality that often makes no logical sense; he will have to learn to listen to the universal rhythms which beat out time. For as Robbins says, ". . . to measure time by the clockworks is to know that you are moving toward some end . . . but at a place far different from the one you might think!" (Robbins, 211).

As the new physics complements Robbins' treatment of time-space and natural paradox, so does the philosophy of Indian Tantratic Buddhism complement and enhance Tom Robbins' attitude toward sex. Philip Rawson, in *The Art of Tantra*, writes that the thread of Tantra is in the idea that "Tantra is a cult of ecstasy, focused on a vision of cosmic sexuality. Life-styles, ritual, magic, myth, philosophy, and a complex of signs and emotive symbols converge upon that vision" (Rawson, 7). Tantra, then, is a philosophy focusing on sexual intercourse as its meditative devise. Sex is the Tantrico's way of forming an I-Thou relationship, of escaping duality. Indeed, Robbins presents the sexual interactions in his book as testimony to the Tantric idea, ". . . that human sexual libido is in some sense identical with the creative and beneficial energy-essence of the Universe" (Rawson, 25). The libido joins humans with Robbins' concept of nature and with the new physics' discovery of a constant and un-dissectable energy field. In Robbins' novel the important aspect of sex is not so much the activity or the partner as it is the enlightenment which sex makes possible. Robbins equates sex with spirituality, comparing his philosophy with that of Tantra:

> Tantricos have always treated sex that way [as if sexuality and spirituality are the same]. One of the basic ideas of Tantra is that instead of denying all our sensual ideas, we can use them to blast off into enlightenment. I think the whole Buddhist idea of eliminating desire is a cop-out; it's not dealing with it at all. You don't deal with it by eliminating it. Flight is avoidance (Miller, 286).

Robbins shows here that moving toward non-restriction, the state of poetry, requires one to remove preconceptions of sexuality. It is important to make the distinction, moreover, that Robbins is not directly advocating specific sexual behavior with heterosexual or homosexual partners. He is insisting on a change in attitude. Western individuals must learn to appreciate the subtleties and expansiveness of the sex act itself. This, too, echoes Tantric thought: "Because sensation and emotion are the most powerful human motive forces, they should not be crushed out, but harnessed to the ultimate goal" (Rawson, 9). That ultimate goal is interaction with a higher energy essence.

It cannot be denied that sex is essential to the human condition. What can be denied, and often is in Western culture, is that sex stands as the erotic, sensual, and natural threshold to the doorway of enlightenment--in Robbins' lexicon, as the physical magic leading to poetry. Robbins stresses that we must learn to accept sexual passion as a given: it cannot be unlearned; it cannot be denied. And in fact, "A repressive attitude is particularly conducive to a sadistic taste, combining pleasure and punishment in a way which satisfies both the desire and the guilt" (Johns, 45). Westerners, in their drive for production and material accomplishment, perceive sex as a biological act of release and refuse to see or are incapable of seeing the value in protracted ecstasy.

Philip Rawson states, ". . . the West's chosen external explanations of sex, attached as they are to a provisional and impoverished rationalization of the infinite complex of human experience, still tend to regard sex as the pursuit of orgasms, mere biological act. Traditional India did not" (Rawson, 87). Indeed, Tom Robbins does not perceive the single purpose of sex as orgasm or even procreation. To Robbins, sex is more than its biology. It is the basic means by which men and women can be lifted out of their limited lives into a broader awareness of the world and themselves. This awareness includes the realization that the world, the cosmos, is not the same to each person interacting in it. Enlightened sex brings one to realizations similar to those evoked by the new physics: the universe is ever-changing and relative and cannot be quantified or contained. As Rawson says, "the whole point of this [the

Tantrico's] rite is that the symbolisms of which they are composed open in his own mind vistas of feeling and meaning which change him, obliterating his materialist view of the world" (Rawson, 22). Again, this concept emphasizes the idea of transcendence from duality--an essential element to understanding, which Robbins has illustrated through discussion on nature, the new physics, and sexuality.

Robbins indicates that it is society's bent for logicality and order which prevents it from accepting the true, often paradoxical and nonsensical, nature of sexuality. For the Tantrico "cosmic bliss is all-embracing love, sexual, maternal, filial, social, and destructive, all at once" (Rawson, 31). Robbins supports this idea showing that all of life's experiences are necessary and add to greater enlightenment, especially those experiences which are difficult to overcome. Tantric writings echo this sentiment: "Tantra means realizing that the concreteness, particularity, narrowness and seeming horror of individual existence and change, the web of cruelty which binds life to life, are essential to creation, essential to bliss, the whole purpose of the cosmic sexual act" (Rawson, 42). Robbins seems to be in accordance with this concept of the cosmic sexual act saying that the Old God is man's "equal and ecstatic partner in the ongoing fuck" (Robbins, 233). Robbins says that these conditions of terror and bliss are built into nature. Error comes in trying to ignore or alter the paradoxes of nature rather than in learning to accept and revel in them.

Even Cowgirls Get the Blues is a book which illuminates the twentieth-century condition. Tom Robbins believes that humankind has the potential to live at a more fulfilled, or enlightened, level. However, he believes that humans will not have access to this transcendent life until they have undergone an internal psychic renewal, a renewal which includes non-limiting and non-dominant interaction with nature. Robbins believes that the world can be lived in with mirth and consideration, that laughter is as essential to balance as is meditation or contemplation. The twentieth-century technological world needs to be feminized; it needs to accept, even to embrace, emotional, compassionate, intuitive, and non-rational aspects of reality. For Robbins the most important quality to indicate readiness for psychic evolution is balance--a balance which comes only when one does not restrict what is to be weighed. Robbins is interested in all-inclusory balance: a wholeness which includes all things in its scope and centers on a fulcrum of "rightness" rather than "rationality."

There is no greater pursuit than that directed toward the substance and quality of meaning. And yet, there is no pursuit more elusive. Society's interpretation of meaning fluctuates from generation to generation, even from moment to moment. Twentieth-century production-oriented and production-successful society has moved toward a technological interpretation of meaning, thinking that if technology does not lead to enlightenment, it certainly leads to an easier and more efficient life. But technology has shown itself incapable of addressing metaphysical questions, and has given humankind, instead, a masculine-oriented society that seeks scientific fact and function for its validation. In this pursuit, individuals have restricted interaction with the natural and mystic qualities of reality. Robbins states that we, as individuals in a society, must learn to accept the non-rational qualities of life, of the universe. The novel invites the reader to contemplate these serious ideas of psychic renewal through the consideration of nature, the new physics, and sexuality. This interdisciplinary access to the novel gives Robbins message a greater depth and resonance.

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PROBLEM-BASED LEARNING AS A TECHNIQUE FOR TEACHING ACROSS DISCIPLINES

Jean W. Knoll

Because real world problems and issues rarely respect disciplinary boundaries, it is often difficult to address them meaningfully in the context of coursework. However, it is just this non-disciplinary quality which makes problem-based learning an ideal strategy for teaching and learning across disciplines. Using a problem-based learning model developed by neuropsychologist Howard Barrows, this paper describes adaptations of Reiterative Problem-Based Learning (RPBL) to undergraduate and graduate teaching and learning, and offers two faculty development activities which can help instructors become more comfortable with a problem-centered approach.

Addressing real world problems and issues in the classroom is what makes learning vital, for students as well as faculty. But because problems rarely respect the boundaries of traditional disciplines, it is often difficult to include them in any meaningful way within the context of traditional course content. Hence, while disciplinary study may be inherently interesting (at least for those of us who teach it), it often seems irrelevant to the problems and issues of our students' lives and, over a period of time, largely forgettable.

The noted physician and neuropsychologist Howard Barrows made this same observation while working with medical students on clinical rotation more than two decades ago. Fresh from two grueling years of study in scientific disciplines like anatomy, biology, and pharmacology, and faced for the first time with the need to solve real "problems" in the clinic, these medical students seemed unable to use or even remember much of what they had allegedly learned in traditional classrooms and laboratories. In an attempt to understand this apparent gap between the classroom and the clinic, Barrows developed a problem-solving model which he believed represented diagnostic problem-solving in the clinical setting, and then re-

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designed the first two years of medical education so that learning was shaped by this problem-solving model.

For some years now faculty members at DePaul University's School for New Learning have been working with the Barrows Reiterative Problem-Based Learning (RPBL) model to adapt it for use in non-medical classrooms at both undergraduate and graduate levels. This focus on the acquisition of information and skills necessary for successful problem solving has led to the development at DePaul of a variety of cross-disciplinary courses focused on problems of interest to the educated adult. Initial adaptations to learning with an "applied" or professional focus, a focus analogous to the clinical problem-solving of medical students, have been relatively straightforward. Greater challenges have been posed by learning in the humanities and social sciences, whose problems and solutions are sometimes difficult to recognize.

An Overview of the RPBL Model

Barrows began his research into the problem-solving process by videotaping seasoned clinicians in actual clinical practice. Using a technique he called "stimulated recall," Barrows played the videotapes back to these physicians immediately upon the conclusion of patient encounters. At various points, he stopped the tapes and asked them to recall what they had been thinking at a given moment on the tape, or what had caused them to pursue a certain line of questions. From hundreds of hours of recordings and stimulated recall interviews Barrows gradually developed a problem-solving model which represented the diagnostic problem-solving he saw practiced by experienced medical diagnosticians. In contrast to the "unbiased" and often rote accumulation of information in the classroom, this practice-based model began with the generation of possible diagnoses or solutions to the patients' problems; Barrows observed in fact that among seasoned diagnosticians a number of diagnoses were generated even when the physician had little hard information, and that this diagnosis generation began within seconds after entering an examination room. The physician problem-solver then structured the gathering of information (through patient interviews, physical examinations, diagnostic testing, and expert consultation) in order to eliminate or substantiate the possible diagnoses, or to generate others. This diagnosis-related data was organized in circular, overlapping webs of information which directly contrasted with the linear delivery of information, largely through memorization, characteristic of the traditional medical classroom.[1]

Using this problem-solving model as its focus, Barrows redesigned the first two years of medical school around a pre-determined set of problems, presented as "simulated patients" and "simulated cases."[2] In successfully completing this set of diagnostic problems, medical students in fact covered the same material they had previously covered in didactic classrooms, but the learning was structured quite differently. Moreover, with each new problem addressed, students became more efficient medical problem-solvers: they became aware of exactly what their information needs were, and more creative about meeting these needs; their learning was mentally organized in ways which provided better access to it for subsequent problem-solving; and their "metacognitive skills," the skills of asking, answering, and evaluating, became more acute.

Barrows described the function of the faculty member facilitating a problem-centered curriculum as "maieutic," from the Greek word for "midwife." As such, the faculty member's primary function is to guide students through the process of inquiry, rather than to present to students the information they will need to solve their problems. This is not to say that the faculty member refuses to share relevant information and expertise; rather, s/he waits until the students themselves have identified the need for specific information in the problem-solving process, and have identified the faculty member as an appropriate source of that information. The faculty member's primary function is not as information source but as tutor, helping students become aware of their problem-solving process; generate alternative and increasingly complex explanations and hypotheses; strategize efficient information-gathering methods; evaluate the adequacy of their resources; and assess the strengths and limitations of their final answers. In the purest RPBL curriculum, the faculty member gradually becomes superfluous to the increasingly efficient and effective student-centered learning process.[3]

Three Adaptations

Adaptation 1: The Applied Research Model

The Applied Research Colloquium is the first of seven required colloquia in the Master of Arts Program for Practicing Professionals in the School for New Learning. In addition to completing a year-long Common Curriculum, each student designs and executes an individualized Professional Concentration, related to a student's current or intended field of professional practice; because these areas of concentration cut across several professional disciplines, they are not well served by existing curricula in any one of them. The Applied Research Colloquium is designed to prepare students to undertake that portion of the Professional Concentration consisting of applied research projects which make application of classroom learning to the solution of problems in the workplace. Such application must be carefully structured, documented, and evaluated for graduate-level credit.

The Applied Research Model (ARM) offered here integrates Reiterative Problem-Based Learning with traditional action research models, particularly those of Kurt Lewin.[4] Because of its application to professional practice, this adaptation of the RPBL model clearly parallels its use in clinical medical education. In this example of the ARM, RPBL is used to refine the definition of the problem to be addressed, identify working hypotheses, and strategize alternative methods of information gathering. Out of this work, students select a limited number of hypothetical solutions to the identified problem, and determine whether they will do "classic" research which uses existing data, or "applied" research which generates original data from the application of theoretical solutions to actual problems in the workplace.

Three facets of problem-based learning become apparent through its use in the Applied Research Model. First, real-world problems are "ill-structured," that is, they do not come with all the information needed to solve them (in contrast to classroom case method); indeed, as data is collected, the definition of the problem may change before the problem-solver's eyes. Second, because the way in which a problem is framed determines its solution, a given problem may have many solutions; for this reason, while the "glasses" of individual professions are useful in problem-framing, the problem-solver must learn to use more than one set of lenses before a problem and its possible solutions can be seen clearly. Finally, no solution to a problem is ever perfect, ever complete, outside the classroom. The essence of problem-solving is not only to propose or undertake a solution to a problem, but to understand fully the limitations of that solution. The solutions to "ill-structured" professional problems always imply the next iteration of problems to be addressed.

Adaptation 2: The History of American Women

Area studies such as women's studies are, by their very nature, interdisciplinary. However, because faculty who teach women's studies have for the most part been trained in one or more traditional disciplines, they often find it difficult to address real problems which cut across the boundaries of disciplines with which they are not familiar. Thus, although specific problems may be considered in such courses, they are usually circumscribed by the disciplinary expertise of the instructor. At its inception this course in the history of American women was an example of this phenomenon; the instructor, trained in literature as an undergraduate and in social and cultural history as a graduate student, drew together literature and social history to present a cross-disciplinary picture of American women. The course was always successful, although course evaluations often included notes like, "Course was interesting, but I'm sorry we didn't get to my issues."

Two years ago the instructor totally redesigned this history course, using the RPBL model. The first three-hour class meeting of the ten-week quarter is now devoted to exercises designed to help students identify problems and questions about the history of American women in which they have some interest. These exercises may include free writing, "free speaking," group interviews, and shared introductions. Slowly, students generate a list of specific questions (for example: What forms of birth control were available to my grandmother? Where did Jane Addams get the idea for Hull House? What was the relationship between women and Native Americans on the frontier?), and select one for further investigation. Between Week One and Week Two, the instructor uses these questions to structure the remainder of the course. While each student undertakes to answer a specific question, the instructor, through readings, videotapes, and mini-lectures, sets the larger context as defined by the students' questions; topics relevant to the above questions have included "Women and their Bodies, Women and their Doctors," "The Emergence of Women's Work Outside the Home," and "The Immigrant and Frontier Experience." She also offers her services as one among many experts to whom students may turn, providing specific information and references as students request them. Each student chronicles the investigation of her or his specific question through a learning log which uses the categories of the RPBL model: What is my question? What are some possible answers to this question? What factual information do I already have? What factual information do I still need? What broader insights would help me see this issue or question more fully? How can I gain access to that information? At the end of the course, the students summarize the answer or answers to their question given what they know so far, what their sources of learning were, and where their research might go from here.

The most difficult and frustrating part of this approach occurs, unfortunately, on the first night as students struggle to find a question. So steeped are most students in respect for the subject-matter expertise of the instructor that many have lost (or failed to develop) the ability simply to wonder about something. In conjunction with the instructor's efforts to work individually and in small groups around question formulation, Ken Macrorie's *The I-Search Paper* which provides additional examples of how to free up one's natural curiosity until "a question finds you," has been a useful resource.[5]

Once the question formulation process has taken some shape, student response to this course format has been enthusiastically positive. Many have used their "I-Search project" as an opportunity to investigate the history of the women in their own families through interviews, diaries, family artifacts, and travel. Because the topics of class each evening emerge directly out of their own questions, students recognize the relevance of the assigned readings and topics of classroom discussion, and readily come to view the instructor as a learning consultant to their own problem-solving process. As the students' funds of information grow over the quarter, the instructor offers less and less subject matter; in the best tradition of adult education, and consistent with the tutorial role defined by Barrows, the students gradually assume the task of teaching one another, and the instructor herself.

Adaptation 3: Faculty-Designed Independent Studies

A third adaptation has been the development of an RPBL-based independent study option. This faculty-designed independent study allows students to identify an area of interest, to develop a question within that area of interest, and to apply the RPBL model to answering that question. At an initial meeting, the instructor assumes the "maieutic" or tutorial role by helping the student "come to a question" which is not faculty imposed but student generated. When a question to be answered or problem to be solved has been settled upon, the instructor then helps the student generate possible answers ("hunches"). They then begin to identify what relevant facts the student already knows, and what facts s/he needs to acquire; the challenge to the instructor here is to help the student become aware of the distinction between what s/he knows (facts) and what s/he thinks s/he knows (more hunches). Finally, the instructor helps the student step back from the specific question or problem to identify broader learning which could help the student see the issues more clearly, shape them in different ways, even make additions to the existing list of hunches. This broader learning might include readings, interviews with experts, or appointments with other faculty members whose expertise bears on the question or problem to be solved. The student may return for another RPBL conference with the faculty member, or may choose to complete the study with minimal additional consultation. At its conclusion, the independent study is evaluated twice: once by the RPBL instructor who assesses the student's skillful use of the model, and then again by a subject-matter expert.

There are several additional elements of the RPBL model that become evident in this adaptation. First, the initial hunches generated by a student are usually automatic, superficial, and in all likelihood what the student believes the instructor expects. It is essential that the instructor press the student to generate further possibilities, even silly ones; these later hunches are usually tied more closely to the student's own interests and unexamined experiences, and as such are the source of the greatest motivation to complete this study. For example, a student approaching her thirty-fifth birthday eventually framed her independent study of sociobiology to learn what the scientific and cultural elements are which contribute to the notion of a biological time clock.

Another element, related to the first, is the determination of where and how to start the problem-solving process. Again, a student's (and instructor's) temptation is to begin where one "ought" to begin. However, because problem-solving is not linear, selecting a starting point in the RPBL model does not eliminate learning in other areas. Thus, the student should start with whatever seems most interesting, and be reassured that many other points of interest will be touched upon as the process unfolds. A student investigating the origins of religious conflict in Northern Ireland, for example, reluctantly proposed to begin her research by reading Irish history. Instead, she was encouraged to do what she really wanted to do: locate relatives in Northern Ireland and ask them what they perceived to be the origins of the conflict. After hours of long-distance phone calls, this student rushed to the history books to sort out the conflicting data she collected from the interviews.

Finally, the role of tutor in the independent study demonstrates that an instructor does not need substantial subject-matter expertise in order to guide the student's inquiry process. Indeed, subject-matter expertise can contribute to a tendency to "lead" students through the learning, rather than allowing them to work their own way through it. In the independent study model, there are few restrictions placed on the subject matter to be pursued. The faculty member contributes the expertise of the problem-solving process and, at the conclusion of the study, assesses the student's ability to use that process effectively. If the faculty member has subject-matter expertise, s/he may also assess this; more commonly, however, a second reader is selected to evaluate the content of the final product. Focusing on the problem-solving expertise of the faculty thus encourages faculty to undertake cross-disciplinary teaching s/he might never before have dared.

Two Faculty Development Activities

1. Faculty Member as RPBL Student

Nothing enhances a faculty member's excitement about this problem-based approach to teaching like experiencing it first-hand as a learner. One successful approach at DePaul has been a half-day workshop in which faculty members engage in group learning around a question or problem of relevance to them.

The workshop begins with an introduction to the RPBL model and its current applications. Workshop participants then use the model to address as a group a problem or question of current interest. Faculty at DePaul, for example, recently grappled with the problem: How should the University expand its physical space on the downtown campus? With the guidance of a tutor/facilitator the group generates a variety of hunches, lists its information needs, and breaks into small groups to pursue the pieces of the problem which interest them. To save time, workshop facilitators may provide a variety of unsorted resource materials; at DePaul, these included university planning documents, real estate projections, and names and phone numbers of various experts who had agreed to be "on call" that afternoon. After 90 minutes of research time, faculty return to pool whatever information and expertise they acquire, re-examine their initial hunches, and after heated debate, agree to a recommended "solution." The workshop concludes with a discussion of the strengths and limitations of the RPBL model as experienced by the learner, and of possible adaptations of the model to specific courses.

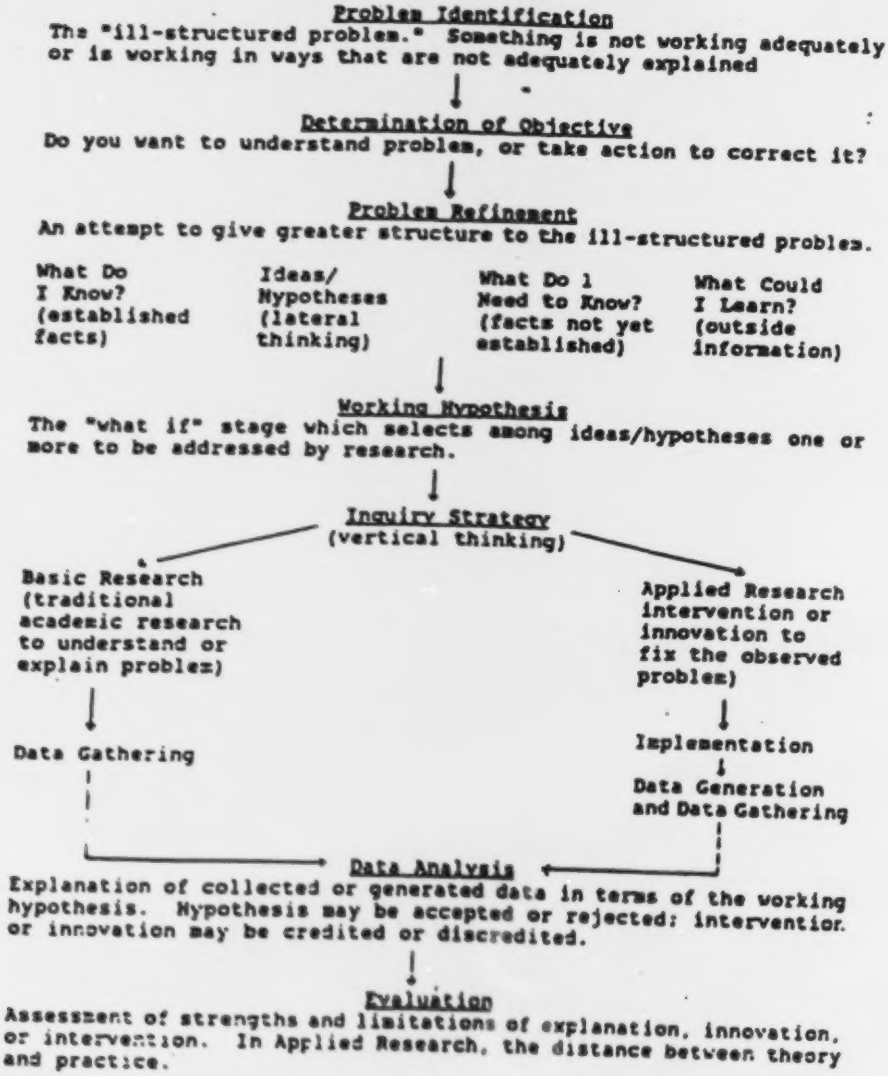
2. Sharing Faculty-Designed Independent Studies

Once faculty members have been excited by the RPBL experience as learners, they need to acquire the skills of the tutor. These skills include not only the ability to guide the inquiry process, but the ability to hear what has drawn the student to this independent study and what will motivate him or her to complete it. One particularly successful way to develop these skills is for faculty to work together in pairs on a series of independent studies. They may work as a tutor team, or one may tutor while the other observes. The crucial element here is an immediate debriefing of the encounter, a "stimulated recall" which asks the instructor/tutor to become conscious of his or her own style and comfort level in the process. This debriefing can be vastly enriched if the student is willing to keep a "learning journal" around the problem-based learning experience, and is able to share what was helpful and what was confusing in working with this tutor. After several such independent studies, each faculty member emerges with a stronger sense of his or her own tutorial style, of where in the process the temptation occurs to "teach" instead of tutor, and of the benefits and drawbacks of bringing subject-matter expertise to this process.

Conclusion

Actual documentation of the benefits and drawbacks of this particular approach to problem-based learning are still inconclusive. Some research suggests that students in problem-centered programs perform less well on short-term examinations, but retain subject matter better over the long term than do students from didactic classrooms.[6] Other research supports the finding that long-term recall of factual information is much improved, and that problem-based learning can be as efficient in covering content as the traditional lecture method.[1] This paper posits that the use of a problem-based approach like the Barrows RPBL model can generate a wide array of inter-disciplinary learning opportunities which are both interesting and memorable to students as they seek to understand their world and live their lives effectively within it.

Applied Research Model (ARM)



Problem Identification
The "ill-structured problem." Something is not working adequately or is working in ways that are not adequately explained

Determination of Objective
Do you want to understand problem, or take action to correct it?

Problem Refinement
An attempt to give greater structure to the ill-structured problem.

What Do I Know? (established facts)

Ideas/ Hypotheses (lateral thinking)

What Do I Need to Know? (facts not yet established)

What Could I Learn? (outside information)

Working Hypothesis
The "what if" stage which selects among ideas/hypotheses one or more to be addressed by research.

Inquiry Strategy
(vertical thinking)

Basic Research (traditional academic research to understand or explain problem)

Data Gathering

Applied Research intervention or innovation to fix the observed problem)

Implementation

Data Generation and Data Gathering

Data Analysis
Explanation of collected or generated data in terms of the working hypothesis. Hypothesis may be accepted or rejected; intervention or innovation may be credited or discredited.

Evaluation
Assessment of strengths and limitations of explanation, innovation, or intervention. In Applied Research, the distance between theory and practice.

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Endnotes

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2. Howard Barrows, *Problem-Based Learning: An Approach to Medical Education* (New York: Springer Publishing, 1980).

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6. Richard S. Eisenstaedt, William E. Barry, and Karen Glanz, "Problem-Based Learning: Cognitive Retention and Cohort Traits of Randomly Selected Participants and Decliners," *Academic Medicine* 65 (1990): S11-S12.

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THE DYAD SEMINAR:
A MODEL FOR EFFECTIVE INTERDISCIPLINARY TEACHING

Stanley J. Spector

The team-taught dyad seminar is the cornerstone of the Interdisciplinary Studies Program at Modesto Junior College. These dyads combine two already existing courses in the curriculum and are taught in a seminar fashion with both the students and the instructors sitting around a table together exploring the issues of the course. The team-taught seminar is a particularly effective method of teaching in an interdisciplinary studies program because the instructors are actively learning themselves. As they are willing to take intellectual chances with the curriculum and each other, they model a positive, non-threatening, learning behavior as they participate in the seminar.

The team-taught dyad seminar is the cornerstone of the Modesto Junior College Interdisciplinary Program. Every semester, we offer two or three interdisciplinary courses in the form of a dyad which combines two already existing courses in our curriculum. This year we have offered five dyads: Introduction to Philosophy and Basic Photography, English Composition and American History I, English Composition and General Biology, English Literature and Cultural Geography, and American History II and Political Philosophy. Some courses are easier to combine than others. For example, two different humanities courses, or even courses from the physical and natural sciences, are usually easier to match than courses from the physical sciences and the arts. Nonetheless, when we construct our dyads we try very hard to combine courses from the different areas of the arts, sciences, and humanities.

The single most important factor in the creation of a dyad is that two instructors want to work together since they spend so much time together during the semester planning and teaching the course. Once they have agreed to teach a dyad, they decide which of the existing transfer courses would best suit their needs and interests. It is critical that the instructors want to teach together since each of the dyads we offer is taught in a seminar fashion. The dyads are seminars both in their setting and in their practice.

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First, we sit around a seminar table. We have found that sharing a table is more conducive to a seminar setting than merely putting the chairs in the room in a circle. By sitting around the same table we share a space together, and we are physically in contact with each other through the table. The class sessions are truly seminar sessions in that each of us is a participant, students and instructors alike. It is true that we all know who the teachers are and who will be assigning grades at the end of the semester. Still, the teachers during the class sessions behave more like seminar participants in the seminar than they do as teachers. While at the beginning of the semester it is up to the instructors to initiate the class discussion, it is more often the students who initiate the seminar discussion as well as the direction we take in our investigations as the semester progresses.

The seminar is an effective teaching technique in general. I think that it is especially effective for interdisciplinary studies because of the positive way that faculty model an interdisciplinary learning behavior which students rarely see in their lower division courses. In our regular, non-seminar, classes, we model a different kind of behavior, both in content and in style. First of all, those classes are not interdisciplinary ones. In my philosophy classes, for example, we generally focus on philosophical methodology and problems. Sometimes I use film or literature as texts that we study, but we still study them from a philosophical perspective. In terms of style, each of us has his or her own teaching style. Some of us approach our courses in terms of a guiding question that we want to investigate during the semester, and we choose our materials and plan our assignments accordingly. Other teachers use other methods to accomplish their predelineated goals.

In a regular seminar, students take on more of the responsibility for their own learning than they do in a regular lecture course. Seminars have topics, and instructors choose texts and assign papers. But the discussion during class meetings is often guided by student concerns as they, together with the instructor, carry on a dialogue about the material. In a team-taught interdisciplinary seminar, all of this happens plus more.

Just as in a regular seminar, the instructor chooses a topic and texts, so also in the dyads do the instructors choose a topic and texts. However, since there are two instructors, one of the differences between the dyad seminars and regular seminars is defined immediately. The two instructors must cooperate in the planning stages to find the topics, sets of materials, and assignments that they are both happy with since neither instructor wants to sacrifice the integrity of her or his course while trying simultaneously to accommodate his or her colleague and create an interdisciplinary experience for the students.

At this stage of the planning process the instructors realize an important aspect of interdisciplinary studies. Each, having been trained in a specific discipline, must give up certain assumptions about the priority of that discipline over other disciplines. Each instructor must broaden her or his perspective about the sets of topics that each wishes to investigate during the course of the semester. What I am suggesting is that in the early stages of planning for a dyad a third perspective emerges that is not simply an aggregate of the two perspectives representing the interests of each faculty member. Neither instructor merely yields to the other. Instead, both instructors work together to forge a truly interdisciplinary approach to a particular problem or set of problems.

Once the semester begins, the dyad seminar appears to be similar to a regular seminar only insofar as we sit around a seminar table. The differences between our dyads and other kinds of seminars are probably not apparent to our students since they have not had much experience with seminars in their careers. To someone who has taught a seminar before, however, those differences are very evident.

The two primary differences are the seminar subject matter and the seminar protocol. First, since the class is team-taught, there are two instructors who attend the seminar daily. Thus, there really is no single teacher or authority in "the" subject matter. In fact, there really is no predefined subject matter analogous to Political Philosophy or American History II, and hence, no "expert." One might think that there are actually two "experts" in the room since there are two teachers there, but that is not really the case at all. In the dyads that have been most successful, neither one of the teachers has been able to assume the role of the expert authority because the topics discussed, being of an interdisciplinary nature, are actually outside of her or his defined field of expertise. Consequently, both instructors assume the role of a seminar participant who is actively engaged in working with a set of materials to study particular problems or themes. The class protocol, therefore, is one where the dyad instructors travel with their seminars to wherever they eventually go in their investigations rather than lead the class to a predetermined place.

Given these two differences between regular seminars and our dyads, we can identify its openness as one of the characteristics of the dyad seminar. No matter how much the instructors plan for the seminar, the actual seminar dynamics tend to move the seminar in ways that neither instructor anticipated. It is at this juncture, when the seminar is progressing in an unforeseen way, that the two dyad instructors most clearly model a positive, interdisciplinary learning behavior. It is in the process of actively engaging in an intellectual pursuit, of embracing the openness of the learning experience, that these two instructors do their most effective teaching. That is, it is not in the presentation of the material of their individual disciplines that makes these instructors "good" teachers. It is rather their modeling of the learner's questioning, probing, suggesting, hypothesizing, correcting, defending, attacking, etc., of concepts and ideas that makes them effective "teachers" in an interdisciplinary studies program.

What I have just described is the experience that my colleagues and I have had when we have taught dyad seminars. This year, I participated in a dyad in each semester. Although the classes that I taught differed and the courses I teamed with were in different content areas, the general description that I have given accurately captures the experience I had when teaching in a dyad. This semester, the dyad I participated in combined Political Philosophy with American History II.

During the planning stage, my colleague and I started by describing to each other the typical content of our classes as if we were teaching them as single courses. We elaborated the themes of the courses and specified particular texts and assignments. Then we asked ourselves what we would hope to accomplish, both for ourselves and for the students, if we combined these courses into a dyad. Or initial response was in terms of understanding each other's content from the new perspective. That is, I thought that students would approach the last 150 years of American history from the point of view of contract theory or Marxism, and my colleague thought that students would approach the concepts of contract theory and Marxism from the perspective of 19th and 20th century American history.

At this point in our planning, we realized that interdisciplinary studies was more than just seeing a particular problem from a multiplicity of perspectives. We realized that we could create an interdisciplinary experience by focusing on a problem rather than a discipline, and so we began to think of our materials as means rather than ends. As we continued planning for the dyad seminar, we transcended the limitations of our respective disciplines and stopped being just an historian and just a philosopher. We became eager students, enthusiastic about identifying and approaching a common problem. This enthusiasm carried over to the seminar itself.

When the semester began, as far as the students could tell, it appeared as though the dyad would focus on understanding each of the two combined courses from the other's perspective. We did in fact choose readings and create writing assignments that seemed to approach each discipline with a "twist" from the other discipline. We distributed a syllabus detailing the assigned readings and explained how we thought the seminar would proceed. Certain members of the class would be responsible for writing what we call seminar papers for each reading. The seminar paper is a one-page text about the primary reading. Students were free to summarize, criticize, question, compare, contrast, build upon, break down, etc., any part of the readings that they chose, and they were encouraged to make reference to the other discipline's sets of materials. They were to write polished papers, duplicate them for every member of the class, and be prepared to read them aloud to begin the class discussion. Every day, we were to have three or four philosophy papers and three or four history papers.

Each student had an idea of how we were going to combine history and philosophy into a single course. Most thought that we would either study philosophy historically, or study political philosophy as it was articulated by the statesmen of American history. Our syllabus did nothing to dissuade students of this idea. However, by the second class meeting, it was obvious to everyone that there was something else going on in the seminar. Not everyone knew what that was, but we were all sure that the class was not really about reconstruction and industrialization, for example, or even Hobbes or Marx. These were the topics that we read about, and these were the topics that we wrote seminar papers on, and yet, very little of class discussion focused on these topics and readings. We did not neglect them; we merely recast their importance. Suddenly, the reading became background examples for the dynamics of the class discussion. It was at this point that my colleague and I were most successful as teachers, for it was here that we modeled a positive learning behavior.

Both of us embraced the spirit of a non-threatening dialogue. As an historian, my colleague brings to his discipline certain presuppositions and assumptions which he takes for granted, and I do the same as a philosopher. It also turns out that we hold divergent views on just about everything from the nature of history and philosophy to our attitudes about current events. Nonetheless, we respect each other as individuals, thinkers and scholars, and we are good friends even though we rarely agree. In fact, we disagree so fundamentally that we wonder how the other, being an intelligent human being, could possibly hold the position that he holds. In the context of this dynamic, we participated in the seminar.

In our first class session, we discussed some of the questions that we thought would emerge during the semester. It was obvious to the students that we did not share many assumptions about the nature of history. We challenged each other's views and positions, and encouraged the students to join in the conversation. What struck us during that meeting was not only how strikingly different our views are but also how neither of us felt that he was being attacked personally. Our discussion was about ideas, concepts and historical facts and interpretations, all of which are deeply rooted in both of our lives. Yet, the students were able to see that it was possible to disagree about fundamental issues and still respect the integrity of your opponent without being hostile. They also saw that it was possible to try different ideas and have them legitimately examined.

This was especially important for me. As a philosopher, I encourage my students to internalize what we study and draw inferences about their own lives and experiences. There is a sense, then, that my classes are about my students' own belief systems. They are the ones who have to examine the consistency of their beliefs. My classes sometimes provide them an opportunity to try out new hypotheses about their experience in terms of the philosophers whom we study. In a dyad, this process is accelerated. It was imperative to me that the seminar participants freely speak and try out their opinions on each other, even when these opinions sound completely irrational or amount to incoherent gibberish. The seminar is a non-threatening forum where we can refine those ideas and consider them from different perspectives.

Thus, as there is no predefined subject matter, the seminar is free to follow the different paths that the seminar participants want to take. What the instructors do is show the students how to take a myriad of paths without fear of ridicule or embarrassment. Our behavior as a model, then, is more important than the fact that he is an historian or I am a philosopher. What we have done, for ourselves and for our students, is embark together on an academic, interdisciplinary journey whose final destination is unknown to us all.

LEARNING JOURNALS AS A TOOL TO TEACH INCLUSIVE MODES OF KNOWING

Phyllis A. Walden

Learning journals in interdisciplinary courses help students become inclusive knowers who use the procedures of traditional objectivist approaches to knowledge and those based on relatedness. By structuring journals so that students practice both analytic and intuitive modes of writing and use techniques such as mind-maps, unsent letters, and dialogues, we help them become flexible knowers as they engage in course content, develop academic skills, and become more effective lifelong learners. In class sessions that actively use material from journals, students learn to collaborate effectively in constructing knowledge.

In a moving speech to the American Association of Higher Education in 1987, Parker Palmer called for a transformation of ways of knowing in higher education. Palmer's critique of objectivist assumptions that have defined both the nature of knowing and competitive behaviors characterizing traditional scholarship, and his advocacy of an academy that includes modes of knowing grounded in relatedness support the efforts of interdisciplinary teaching. Palmer cites the alternative epistemologies of feminist thought, black scholarship, native American studies, and ecological studies as "promising movements toward community in the world of the intellect today."[1]

An underlying educational objective in interdisciplinary courses, if not throughout the curriculum, is to assist students in becoming inclusive knowers.[2] Such knowers are able to use the tools of analysis and abstraction. Yet they are also able to connect fully and deeply to what they know. They are able to tolerate ambiguity and to consider sympathetically a range of perspectives, even deeply conflicting ones. They are able to use a multiplicity of inquiry methods, listen thoughtfully, question critically, and respond generously to the ideas of others. Here I describe ways to use learning journals to help students become inclusive knowers and build community in

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which "creative conflict" can occur.[3] I have designed the structured learning journal as a laboratory where the student engages in the content, uses and develops academic skills that support traditional objectivist modes of knowing and those grounded in relatedness, and becomes skilled as a lifelong learner.

Designing the Journal for Inclusive Modes of Knowing

Through careful structuring and active use in the classroom, the learning journal is both a document of an individual's thinking and learning process and a tool to stimulate dialogue and discussion. Students practice several modes of writing that engage them in objective, intellectual knowing and subjective, intuitive knowing.[4] A range of questions requires experimentation with several journal writing techniques, including lists, mind-maps and dialogues. Finally, a structured journal integrates topics that address content, academic skills and learning skills.

Within the first few minutes of a course, students practice freewriting as a basic journal writing mode by considering their goals for the course and initial thoughts about the content. When freewriting, the individual writes quickly without attention to mechanics or quality of writing.[5] This mode generates material quickly, and brings out connections to other topics and to the student's prior experience. While students always have the option to keep this writing private, many eagerly share, which provides the opportunity to emphasize the centrality of students' voices in this class and the importance of collaboration. This material helps in "finalizing" the course syllabus and agenda. By setting goals and considering their current understanding of the content, participants practice key lifelong learning skills.

In reflective writing, students step back and consider material from an objective stance, examining the freewriting for further meaning and connection. I link the in-class freewriting to an assigned journal entry in a reflective mode.

> Think about the freewriting you did in class, and write a reflective entry. What do you notice as you review this writing? Any surprises? Any topics, thoughts, insights to consider further? How did freewriting work as a process? Any difficulties? What do you hope to learn?

Throughout the term, students use both reflective writing and intuitive writing in their journals, and develop an appreciation of the interplay of these approaches.

Listing, which captures a good deal of material quickly, is a useful journal technique to introduce early.[6] In preparation for the second class, students list their strengths as learners, and what they want in a classroom atmosphere that enhances learning. These lists engage participants in self-assessment and prepare them to discuss guidelines for classroom expectations which we negotiate during the second session. Lists linked to course content can be in a playful, intuitive mode ("List all the 'isms' you can think of") or a reflective, analytic mode ("List the characteristics of Marge Piercy's utopia"). Asking students to generate a list of questions from a reading assignment connects attention to content with the development of critical reading as an academic skill and active reading as a lifelong learning skill. By using these lists to set the classroom agenda, the course focuses on student questions.

With mind-mapping, students organize information by developing a visual representation of how concepts and ideas are interconnected.[7] I demonstrate mind-mapping in class. In a research methods course, students read a mystery novel as a first assignment. The class works together to do a mind-map of the inquiry strategies used to solve the mystery. In a course on perspectives on human nature, I develop a mind-map to show questions for inquiry from the sciences, social sciences, and humanities, and the interrelationships among these. Students practice by doing a mind-map of a reading assignment or a paper topic. Many find mind-mapping an enjoyable and effective strategy for organizing information. It draws on intuitive modes of knowing and facilitates making connections, seeing the whole, and showing patterns and relationships. Switching to a reflective mode of writing leads the student to work out intellectually the connections that are felt in the mind-mapping process.

As students develop a content base and become confident journal writers, I introduce assignments requiring more sophisticated approaches. In an unsent letter, students write a letter to a person and create a response.[8] The following was assigned in a women's studies course.

> Betty Freidan, who remains convinced of the soundness of the ideas she put forth in *The Feminine Mystique*, has just completed reading Mary Daly's *Gyn/ecology: The Metaethics of Radical Feminism*. Ms. Freidan is moved to write a letter to Daly. Write the letter she might write.
>
> Next, assume the perspective of Mary Daly as she reads this letter. Write the response you would expect her to make. What did Freidan say that Daly would agree with? Take issue with?

In doing journal letters, students develop the ability to articulate and examine perspectives different from their own. To do this assignment well, they need to get inside the perspectives of these thinkers and make complex comparisons. Asking students to add reflections on their learning and about their writing process gives them practice monitoring their progress, a central skill in learning how to learn.

The unsent letter prepares students to use what is perhaps the most powerful and engaging journal writing technique, the journal dialogue.[9] A dialogue shows the process of knowing and thinking, and may or may not show conclusive results. By inviting students to use dialogues in their journals, and helping them develop the skills to do this, we enable them to enter into provocative conversations with voices from other times and places, as well as with contemporaries beyond the particular classroom.[10] Through using dialogues, individuals strengthen the ability to think critically by articulating, responding to, and evaluating alternative points of view.

A journal dialogue is a written conversation that includes at least two voices. It takes awhile for students to become comfortable with this technique, and I introduce dialogues carefully and provide support as students experiment. The class as a whole works collectively to write a dialogue between one of the writers the group has read and the class itself. Freire's "The Act of Study" is a provocative short essay that suggests the value of engaged dialogue.[11] We collaborate in writing a class dialogue with Freire about the content of the essay. Students copy this into their journals as an example to refer to when they are writing one on their own.

Students next write an in-class journal dialogue, using the approach Progoff describes. They begin with something familiar, such as a dialogue between themselves and a best friend (or family member or favorite teacher) about their experience with this course. First, they list people with whom it might be useful to have a journal conversation about what they are learning. After they have chosen a person, I encourage students to relax, and imagine the presence of that individual. They next write a brief statement that sets the context by capturing key issues, questions, or concerns. When they are ready, they greet the person, ask a question or make a comment to start the dialogue, and record the dialogue as it emerges. Participants reread what they have written, and write a reflective entry about their response to this dialogue. We discuss their observations about this technique--some find it engaging and enjoyable from the beginning, and others find it awkward. Follow-up assignments encourage students to experiment with this form and examine the contribution of dialogues to their own thinking and learning processes.

The dialogue format is adaptable to the content of a range of courses. In a literature course, try a dialogue with a fictional character or the author of a poem. A scientific concept or a mathematical law might provide a fruitful dialogue topic. In a professional course, try using persons from a case under consideration as voices for dialogues. Dialogue assignments are particularly useful in helping students integrate readings throughout the course. For example, in a course on women and philosophy, students summarize the points St. Thomas Aquinas might make in reviewing Elaine Pagel's *The Gnostic Gospels*. A few weeks later, they do journal dialogues between Mary Daly and St. Thomas on women in the Church.

The learning journal is cumulative. The writer builds on material and insights from earlier entries in later writing. Dialogues help keep the journal a dynamic, growing document and prevent students from writing in circles. Journal dialogues, like conversations, rarely end conclusively and they can be picked up and expanded on later. A major source of expansion comes from the active use of learning journals in the classroom.

The Learning Journal as Resource in the Classroom

Using journals actively in the classroom offers students practice in collaborative, communal approaches to learning and thinking. As individuals write in their journals they relate material and make connections. As they work with peers they learn how to communicate with others in thinking more fully and deeply about issues and questions.

I sequence classroom activities using journals carefully. We discuss issues of privacy, and I indicate that participants have control over what they share and do not share, although when I assign a specific topic to the group, my expectation is that at least parts of that entry will be shared. In preparation for partner and group work with journal material, students complete an entry on listening, an academic skill that is basic to learning.

> Reflect on connections between listening and learning. What kinds of listening do you do as a learner? When do you feel heard? How do you know when you have been heard? What helps you hear others fully? What barriers are you aware of?[12]

Discussing this entry is an opportunity to emphasize skills needed for creating classroom community. Within the first two sessions, students select a partner and talk about their writing. Many read passages from each others' journals at this point.

Small group activities build on individual work begun in journals. The hypothetical mid-term examination exercise results in lively discussions.

> Review your journal and reflect on what you have learned. Write an hypothetical mid-term examination question that captures what you

> believe to be the important ideas and concepts of the course. Answer your own question.

This assignment stresses student responsibility for organizing course material in a meaningful way. After creating and answering a question, participants continue developing question-asking skills in a small group activity by giving feedback on each others' questions, responding to those questions, and sharing and refining their own answers. Each student practices the role of questioner, responder, and observer. Groups practice evaluating questions and identifying those that lead to productive, dynamic conversations. Individuals learn to give constructive feedback, to receive and use feedback, and to appreciate the variety and depth of questions that emerge as class members consider the same material. Students often express surprise that questions can be answered in such different ways. This assignment dramatically illustrates that there are many ways to organize the same material, and a "real" question may not have one right answer.[13]

Toward Self-Structured Learning Journals

Most students need guidance initially in using learning journals and appreciate structured assignments. However, in educating individuals for lifelong learning, we need to help them make the transition from teacher-designed assignments to trusting themselves to ask their "real" questions and to discover answers for themselves. A self-assessment entry, completed about the middle of the course, is a component of this transition.

> Reread your journal and write an entry about your observations. As you review past assignment sheets, what do you notice about the kinds of questions that you choose to write about and those that you do not write about? What kinds of entries are comfortable for you? Difficult?

Next, students create their own question, write an entry about the process, and complete their own assignment.

> Read the assigned selection and develop a journal assignment that helps you organize the material. Describe this process, what topics you consider, and how you decide on your assignment. Complete your assignment as a journal entry.

I suggest fewer topics toward the end of the course.

A concluding self-assessment assignment gives valuable information on how well the student has grasped course content, expanded academic skills, and gained awareness of the learning and knowing process. This includes a review of course objectives and an assessment, with supporting documentation and references to journal entries, of how these have been met. They write an introduction, give the journal a title, and provide a table of contents.[14] Students convey how they have approached and organized course content, assess their use of the learning journal and their progress in creating their own assignments, and demonstrate their thinking and writing skills. A final journal entry focuses on the student as knower.

> What questions remain for you as the course ends? What questions can you reasonably expect to answer given time and access to existing resources? Choose one question and suggest how you would go about answering it.
>
> What questions are not answerable, given our current knowledge? Which questions do you suspect can never be answered? Why? How do you handle this uncertainty?[15]

By revisiting the questions and goals identified in the first few journal entries, students reflect on their learning, anticipate future learning, and contemplate the limits of knowledge. At the final class session, participants share these entries and assess their effectiveness as a community of knowers.

Endnotes

1. Parker Palmer, "Community, Conflict, and Ways of Knowing," *Change Magazine,* September/October 1987, p. 24.

2. I use the term inclusive mode of knowing to emphasize the both/and aspects of integrating objectivist and relationship approaches. There are a variety of terms used in the literature. Brain research is framed in terms of right brain/left brain. Belenky *et.al.* use procedural knowledge and connected knowing that become integrated in constructed knowledge. Polanyi describes scientific knowledge and tacit knowing.

3. Palmer, p. 25.

4. See Tristine Rainer's *The New Diary*, Chapter 4: Basic Diary Devices. Her discussion of four basic modes of expression--catharsis, description, free-intuitive writing, and reflection--has been very useful in thinking through ways to structure a learning journal.

5. For a detailed discussion of freewriting, see Elbow's *Writing Without Teachers (pp. 3*-11) and *Witing With Power* (pp. 13-19).W

6. See Rainer, pp. 72-79.

7. Tony Buzan's *Use Both Sides of Your Brain*, Third Edition, offers detailed instructions for doing mind-maps and colorful examples.

8. Rainer, pp. 98-102.

9. Ira Progoff's *At a Journel Workshop* has been most useful in thinking through ways to use the dialogue technique. See pp. 158-177 for the basic description of dialogue with persons.

10. See Richard Davis' delightful discussion of dialogue assignments in "A Plea for the Use of Student Dialogues."

11. Paolo Freire, *The Politics of Education*, pp. 1-4.

12. This assignment draws on questions interviewers used in *Women's Ways of Knowing*. See pp. 231-236.

13. Carol Gilligan's discussion of "good questions," "right questions," and "real questions" in "Teaching Shakespeare's Sisters" helps students clarify "real" questions.

14. Richard C. Sweterlitsch, "The Honest Voice of Inquiry: Teaching Folklore Through Writing," *The Journal Book*, p. 245.

15. Ann Kerwin and Marlys Witte, "Learning and Teaching the Unknown: Pathway to finding the 'Intellectual Virtues.'"

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DEVELOPING NEW METHODS, MODELS AND MARKETS

INDEPENDENT, NONRESIDENTIAL GRADUATE STUDY: NEW MODELS, METHODS AND MARKETS FOR THE UNIVERSITY WITHOUT WALLS

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The Regis University Master of Arts in Liberal Studies (MLS) is the logical extension of over twenty years of experience with undergraduate guided independent study in the University Without Walls (UWW). Developing and implementing this program has been rewarding for students, faculty and program administrators, but it has not been without its ups and downs. In this paper, we will deal with the rationale for the MLS program, the assumptions guiding its development, and our experiences in implementation. Particular attention is paid to the points at which our assumptions collided with our experiences and the lessons that we believe may be derived by others interested in developing non-traditional graduate programs for adult students.

In the early 1970's, the Ford Foundation helped finance a new model of undergraduate education in the United States. With the advent of universities "without walls," students wishing to complete undergraduate collegiate degrees could do so without spending significant amounts of time in residence on a college campus. Earning and/or completing an undergraduate degree in a "without walls" format meant that college credit could be earned for documented life experience, for traditional classroom attendance, for completion of specific exams and for indepen-

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dent study. For over twenty years, this nontraditional approach to undergraduate education has prospered and gained increasing credibility in higher education circles.

And undergraduate education was not alone in its changes. Since 1972, calls for reform in graduate education have also been sounded by many voices. Groups like the Commission on Non-Traditional Study, the Council of Graduate Schools in the United States and the National Board on Graduate Education supported the increased use of nontraditional education in meeting the changing needs of consumers and society. While a variety of proposals and recommendations has been advanced, the undergirding and common theme is the recognition that the graduate student of the 1990's is a mature adult, often returning to school after time spent in roles other than that of student. Also, the "new" graduate students are those who need programs that are appropriate for their levels of skills and knowledge, their constraints of time and place as well as their goals for self-directed learning.

Recognition of the need for new models for graduate education inspired the idea for a Master of Arts in Liberal Studies to be offered by the University Without Walls. The idea had its inception at Loretto Heights College in the 1980's; it survived the closing of the college and a transfer of the University Without Walls to Regis University. In the spring of 1989, a committee began work on a formal proposal. In January 1991, the Board of Trustees at Regis approved the degree. The first group of students entered in April 1991; the program currently enrolls approximately 90 students.

Several assumptions guided the development of the program; many of these emerged from over twenty years of experience with undergraduate independent studies in the University Without Walls, and some were built on accumulated knowledge of adult learning theory. In its first year of operation, these assumptions have been tested; some have been confirmed, but the appropriateness of other assumptions has been challenged. Our experiences at the University Without Walls may prove helpful to other programs who wish to develop nontraditional graduate programs for adults.

Assumptions About and Experiences With Students

1. Graduate students will be more ready and perhaps more capable than undergraduate students to undertake and be successful at independent study. Since independent study is frequently a natural part of traditional graduate programs, a program that is centered on independent study seemed reasonable at the graduate level. Moreover, if independent study made sense at the undergraduate level, it made even more sense at the graduate level.

Experience, logic and literature suggest the general appropriateness of this assumption; indeed, it has held true particularly for those students who were alumni of the University Without Walls. Additionally, it has been true for other non-UWW alums, but a substantial minority have not made an easy adaptation to independent study and we have observed varied levels of readiness for and openness to independent study. Contrary to our experiences with undergraduates, many of the current graduate students have come to the graduate program after quite successful and pleasant careers in traditional education. These individuals have succeeded in the classroom delivery system and seem to experience some difficulty at adapting to the non-classroom based model.

Isolation from other students has also been a concern for some. And many of these students have spontaneously initiated the formation of study groups, so as to experience the sense of community that the classroom model provides. Indeed, a common reaction after a small group discussion is often , "I was stalemated in my work before this discussion, now I know how to proceed."

Programmatically, we are exploring ways to help students self-select and aid us and them in spotting problems earlier. When an adult student expresses a hint of doubt about the student and program "match," there may exist more than slight ambivalence in the student's mind about his/her ability to succeed.

2. A great deal of literature suggests that adult students are self-directed in their learning and can be well-focused. In view of these characteristics, we assumed that adult graduate students would be clearly able to articulate their goals and motivations for graduate study. In fact, in our original proposal and application process, we asked students to define their proposed studies in detail, including ideas for courses as well as plans for the final project.

While Brookfield and others suggest that the general case for the self-directed adult learner may be overstated, this specific assumption was tested and refined early in the history of the program. Early experience revealed that the first class of applicants to the program were those who had been waiting for some time for the University's approval of the program. They were more likely to be UWW alums and their goals tended to be personal, narrow and tightly focused. In fact, some of these students have been so narrowly focused on a particular topic (i. e., theocracy or historical preservation) that advisors and faculty have experienced difficulty in broadening perspectives and fostering openness to diverse views and theoretical constructs.

Subsequent classes of applicants, however, expressed enormous difficulty in defining their goals with as much specificity as they perceived was required; they suggested to us that the application process itself was a barrier to the program. From this experience, we revised the application, requesting only a personal statement that reflected on the applicant's learning style, knowledge of independent study and familiarity with graduate work. Perhaps as a consequence, the students who have been members of the second, third, and fourth classes have shown less well-defined personal and intellectual goals and have raised different but significant teaching and advising challenges for faculty and staff. Hence, the application process was significantly and directly related to the type of students ultimately enrolling - a finding that was infinitely logical and satisfying but nonetheless rather serendipitous.

A final note here is pertinent: a brief and recent market survey of currently enrolled graduate students revealed that the most oft cited reason for pursuing a graduate degree through the UWW program was to prepare for a new career; the least important reason for our cohort group was to increase chances for a promotion in a present job. These findings reconfirm what the literature suggests about adult students, namely, that they very often return to school in conjunction with transitional phases in their lives. This awareness should no doubt suggest to us and others that adult learners may need more specific suggestions about the logistics and the processes involved in "becoming" someone else - in moving from one set of identifying characteristics to another.

3. If the courses and learning experiences do not meet a student's needs, the student will let us know.

Our experience suggests that students may not always know how to let us know that they wish to communicate. Students may not know that a more satisfying learning experience can be available unless they are aided in identifying the "pinch points" in the learning process. We have struggled with finding the delicate balance of too much program-initiated contact with students and too little. We have talked of the means by which we can build student self-confidence so as to support student-initiated contact. In general, however, a majority of students make appropriate contact (normally once every two to three weeks); a small minority calls in a flurry and with great frequency, and another calls rarely if ever.

Assumptions About and Experiences With the Program Design

4. An adult graduate program represents a unique opportunity to combine theory and practice. At the very least, theory could be interwoven with practice. The structure of the learning contract itself suggested the interdependence of theory

and practice, as it provided opportunities to identify not only course and learning objectives, but also learning activities as well.

Our experience suggests that the content of the first and required courses (the core courses) is more theoretical than practical. Through the core courses, it became possible, even likely, that some students would focus early and exclusively on theory. Others, most notably the education and certification students, are exposed to the reflection of theory in practical classroom applications. Interestingly, the graduate students who seem to struggle least are those who gain direct and early experience with the combination of theory and practice. Perhaps excessive emphasis on theory alone may recall for some students' previously negative and unsuccessful graduate school experiences.

5. Inasmuch as adults are often more able to make connections among issues, concepts and topics, we reasoned that adult graduate students would understand the concepts and the applications of interdisciplinary studies. We did not distinguish among interdisciplinary, cross-disciplinary and multidisciplinary studies.

The interdisciplinary features of the program have presented great challenges for faculty and staff. Principally, we have attempted to encourage students to make those connections in cross-disciplinary discussions during the on-campus seminars. But cross-disciplinary discussions seem difficult to design and facilitate. And encouraging students to cross the lines of their disciplines is also a challenge.

6. The individualization and personalization (i.e., mentoring) that is thought to be so critical to adult learning and which is the hallmark of the undergraduate UWW program would readily translate to a graduate program.

This assumption was appropriate, as individualization and mentoring are attractive features of this program. Two graduate faculty advisors serve full-time to have contact with a reasonable number of students, guiding them through degree plans and learning contracts. However, some students express difficulty in understanding the role of advisor, and a more proactive approach by the advisor at an early stage is necessary. The role of the advisor at the undergraduate level has seemed more clearly defined and specified. Students unfamiliar with individualization may need to be urged to communicate about their specific needs and aspirations. Also, those students who possess less well-defined interest areas or educational goals may require structures, systems or supports that are not yet in place within the program.

Additionally, the roles fulfilled and assumed by core faculty have differed from those assumed by the course consultants at the undergraduate level. While undergraduate course consultants often describe themselves as mentors or facilitators, core faculty tend to use nouns like "teacher" and "tutor" in describing their role as it has been actualized.

7. Early success in the program would be contingent on strong support systems. Core courses were developed to provide an easy transition from more "structured" and familiar delivery systems to more ambiguous and less familiar independent study.

Strong support mechanisms are critical for independent study and are proving to be more important than initially anticipated. Core courses (delivered in an independent study format, but with University-selected faculty and standardized learning contracts) have been critical to providing some impetus for potential procrastinators and have served to provide some grounding when both subject area and delivery system are unfamiliar and seemingly ambiguous. However, an early presumption about the order in which core courses would be completed (prior to the individualized courses) may be open to debate. We sense that core courses may create some comfort; but for some, they do not provide a sufficiently rapid or relevant start to graduate study. It is possible that some students would require an early individualized course combined with a core course, rather than two semesters of core courses prior to designing any individualized study.

8. Actual on-campus time could be minimized but made valuable with two day seminars at the beginning of each semester. In this way, the program could serve the rural learner who lives at some distance from the University but is not served by other institutions.

Students have been attracted to the UWW program for this reason. However, we are still working on the components of the seminars. We have noticed that, during the course of the seminar, students have developed support groups which then meet outside of seminar; this rarely happens at undergraduate level. We have also discovered, perhaps coincidentally, that some of the materials and readings used within a seminar environment are not suitable for distance learning. Indeed, reading material that works well in a classroom may not be appropriate at all for independent study.

In sum, the Regis University Master of Arts in Liberal Studies program represents a successful attempt at extending the University Without Walls paradigm to the graduate level. Student response suggests that the program is an exciting and compelling option for adult learners. The non-residential and nontraditional aspects of the degree are attractive for many. Yet, the future demands much creativity, insight and care at resolving and smoothing those program features so that the student experience continues to be a positive one.

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CRITICAL THINKING AND THE "POLITICALLY CORRECT"

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As academicians we know the importance of being able to think critically and to evaluate information. Traditional education, however, does not always foster these skills directly, and the most common metaphors for education involve a one-sided transmittal of information to the unwashed masses. This paper explores our model for teaching critical thinking, using the idea of "political correctness" as the topic to be thought about. We also describe the use of our model in a freshman year interdisciplinary program we developed and discuss the way program faculty have changed metaphors and activities for teaching.

Academicians have long realized that we cannot know everything about our discipline. We know that our students won't become experts in their chosen areas unless they learn how and where to find what they don't know and then learn how to critically wade through the proliferating information on any given topic. The information explosion and cognitive research underscore the need for a different metaphor for teaching than the transmission or banking ones. Student-centered instructors lean toward a transactional model, one stressing the need to help our students develop critical thinking skills at all levels of education, but particularly for college and adult education.

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The importance of critical thinking to academic success is an ongoing topic of discussion as well as the focus of many journal articles and textbooks. Those of us who teach at the university recognize the importance of critical thinking to the professions for which we educate students, to the quality of learning we expect of students, and to real world situations where, for example, we see students being hoodwinked by advertisements and demagogues. Students, on the other hand, are often uncomfortable when answers are not always clearly right or wrong, when information cannot merely be memorized, when alternative solutions do not always match up with their beliefs, and when completing tasks requires problem-solving and at least a bit of cognitive sweat.

As instructors in Salem Campus's unique freshman year program Today for Tomorrow (T for T), we have developed a model for teaching critical thinking which involves blending personal values, experiences, and reactions with cognitive learning. Underlying the model is the assumption that skills are best taught through application to course content.

Although our model was originally designed for a specific subset of our students, we have discovered that it works with others. The students who enroll on Kent State University--Salem Campus have certain common characteristics: they have usually attended underfunded rural or small town high schools or vocational schools and rarely participated in a college preparatory curriculum; their experience with the wider world is often limited to what they see on television or in movies; they tend to come from fundamentalist Christian backgrounds; and they do not question authority. Some 90% of our entering freshmen place into at least one developmental course (most often mathematics), and the majority are the first generation in their families to attend college. Many of them expect college professors to provide knowledge that they will memorize and regurgitate on tests, and they often expect knowledge to be directly related to that "good job" they will get once college is "out of the way." In other words, these students are not academically oriented. They will also experience conflict when their values clash with generally accepted academic concepts like evolution or cultural diversity.

While we cannot profess that our model works well with students with strong high school backgrounds and different expectations in regard to education, we will share what we have learned so it can be adapted to other populations.

The model consists of a series of assignments and activities that provide a structure to help students experience critical thinking. We begin by having students examine what they know or believe about the topic. They may be asked to brainstorm what they know, or they may be asked to react to statements about the topic which could be considered controversial or thought provoking. Students are often asked to separate facts from beliefs and feelings at this stage. Students then gather information by reading, using AV materials, listening to lectures, sharing information (or sometimes misinformation) with one another, and by dealing with questions that require them to go beyond the facts presented. Closure comes before all questions are answered but not before many more questions surface. Students end a topic or unit by reviewing what they know, what they still need to know, and how all of this fits with their personal beliefs and values. This vehicle for teaching critical thinking allows for meaningful practice, exposes students to ways various people address a problem, and encourages them to then internalize the information and blend it into their world.

The Workshop

This workshop addresses an audience interested in teaching critical thinking, in blending values-based education into the classroom, and in discussing the charge that the academy has an unofficial agenda that teaches "correct" (liberal) attitudes toward controversial subjects. It begins by explaining the model. Next, participants experience the model by engaging in a critical thinking activity about "politically correct" teaching. During the activity, participants examine their prior knowledge and beliefs, read a New York Times article, and engage in collaborative learning.

Creation of T for T

The Today for Tomorrow program was designed eight years ago when our campus dean, James Cooney, gave us the ideal charge: "Forget all institutional restrictions," he told us; "design the perfect program to meet our students' needs."

We realized that, given the characteristics of our students, we needed to focus on the whole student; the cognitive and affective domains of student development could not be separated. We wanted a challenging program and a pedagogy that would significantly decrease the gap between our students' experience and the expectations of the academy, thus increasing their chances of academic success.

The pedagogy and curriculum reflected what the faculty committee knew to be important for the academic success of our students. We had in common an openness to learning from one another irrespective of disciplinary boundaries, an abiding faith in the value of liberal education, and a commitment to process rather than content. We were academic risk-takers, willing to challenge an institution that privileged traditional disciplinary boundaries.

Curriculum

The curriculum we created centers around a year-long multidisciplinary core course, the Foundations of Modern Thought. Team taught, this course introduces students to eight major concepts through a case study approach. Support courses include the freshman English sequence, Critical Reading and Thinking, University Orientation, a course exploring values in relation to knowledge and learning, Political Analysis, and physical education. Students in the program enroll in these courses together. They enroll in varied mathematics courses based on basic skills assessment and declared major.

Grant supported field trips to acquaint students with the broader culture are included in T for T. Some of these are tied directly to course material like a visit to a planetarium when the topic of study is the concept of the heliocentric universe and the conflict between science and religion or a trip to the theater to see a play being studied in English. Others expose students to an opera, a symphony, and a ballet. For many of our students, a field trip is a first-time visit to a large city, a research library, or a museum. Reaction papers and journal entries tell us that these trips are valuable for students, even when a young man occasionally sleeps through the opera.

The program emphasizes communication skills using a whole language approach. The readings assigned throughout the curriculum vary from the personal essay to primary research reports and from poetry to fiction. Writing is used in all courses from writing to learning exercises and journals to formal essays. Students also deliver oral reports throughout the year, and they summarize their primary research project for a student version of a professional conference as a capstone experience. Collaborative learning activities are built into every course. Academic survival skills like asking questions, adjusting to instructor style, time management, test taking, and information retrieval skills are stressed and taught as needed.

The critical thinking model (summarized earlier), the seminar-like classes, and conscious effort on our part create, nurture, and maintain a sense of community which allows students to confront ideas that conflict with their previous understanding or values in a supportive environment. Given the characteristics of our students, we know they face potential value conflicts in every general education course they will take. Consequently, we build in opportunities for this kind of clash to occur and help students deal with it cognitively and affectively. Sample concepts that frequently challenge our students' beliefs include evolution, racism, censorship, and the notion that language affects perceptions of reality. Of course, any of the ideas labeled "politically correct" are anathema. Nonetheless, in order to succeed academically, students will need to learn how to distance themselves emotionally from certain topics in order to learn them.

Outcomes

T for T has proven itself beneficial to students who complete the program. Surveys completed after two and five years indicate that they retain and continue to use the learning model; they question, discuss, use a notebook/journal, and generally actively engage with ideas in their courses. Some experience frustration with "regular" students who do not speak in class or enter into discussion and with instructors who teach using the straight lecture method. Of those who complete the program, 67% remain in school to pursue the baccalaureate degree. At the end of each year, students report to outside evaluators increased tolerance for the ideas of others; improved reading, writing, speaking, organizational and studying skills; increased self-confidence; an awareness of their own values and how they were and are shaped; and a broadened sense of opportunities and potentialities.

An outcome we did not anticipate was the positive effect the program had upon those teaching in it. First, it gave us a greater sense of colleagueship that has created a number of collaborative papers, workshops, and presentations, such as this one. Next, it brought us together formally to discuss students and their difficulties, which made all student problems concrete and personal rather than abstract. Of course, the success of the active learning model changed forever the way we teach all our courses; even in the "content" courses we teach we engage students in more active learning and critical thinking. There is a spillover effect upon the entire campus as faculty members who don't teach in T for T tell us that they notice when our alumni enroll in their sophomore level classes because they ask questions and willingly engage in discussion. Impressed, many faculty members have worked with us to incorporate elements of the active learning model in their courses. Additionally, the success of T for T is encouraging other examples of cross-disciplinary collaboration on our campus and throughout the regional campus system.

Conclusion

Despite the positive outcomes we have noted from the program, our efforts are not always in agreement with "tradition." The interdisciplinary program, the model we use to teach critical thinking, and our work with faculty and students have been our attempt to go beyond the metaphors traditionally used within our university. The metaphor we have adopted to best express teaching and learning as we perceive it is "a community of active learners" where the words "community" and "active learner" refer not only to students but to faculty members as well. The metaphor suggests the social construction of knowledge and positions the instructor as leader rather than expert. It suggests that students are responsible for their own learning and that the instructor, too, might learn. All in all, our metaphor is "politically correct"; we hope that someday it becomes politically correct as well.

MEETING NEW MARKETS

Barbara Buchanan
Richard Rudolph

In seeking new markets, the College of Public and Community Service, University of Massachusetts, Boston, has been attentive to demographic and technological changes which have affected the knowledge and skill requirements for employment. These changes have created new student markets. The college has also identified other markets through research and other types of outreach activity. This paper briefly describes several program models to illustrate how institutions of higher education can develop cost effective strategies for providing educational services to new student markets in the 1990's.

This paper will explore different ways in which the College of Public and Community Service (CPCS), University of Massachusetts, Boston, has developed new methods and models to meet the needs of new student markets. Since 1973 the College has intentionally recruited adult learners for whom access to higher education has provided an opportunity to prepare for new careers or for advancement in their chosen work. The interdisciplinary, innovative features of this undergraduate institution have provided the flexibility to develop new approaches and models to meet the expanding requests for diverse educational services. For twenty years the College has responded to requests from social service agencies, unions and government agencies for collaborative initiatives to educate and train their staffs.

Changing demographics in Boston as well as changing requirements for employment have necessitated the development of strategies to meet certain needs. For example, the increasing number of non-English speaking immigrants in the Boston area has made it essential for hospitals to provide "Patient Interpreters,"

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hourly employees who serve as interpreters between non-English speaking clients and medical/hospital staff. The College in collaboration with a newly formed Medical Interpreter Association is being asked to develop pilot curriculum to educate persons desiring to enter this new employment field.

Technological change in the job market and budget crises in institutions have led to lay-offs, decrease in entry-level positions and the reclassification of jobs. This was the situation at Boston City Hospital which led to another inquiry requesting the College to design an educational program to retrain entry-level employees for newly classified mid-management positions. The College identified barriers which inhibited career mobility and chose to focus first on literacy skills for workers aspiring to move to newly classified mid-management positions. The above examples represent requests initiated by external groups, agencies and organizations.

In addition to these types of requests which emerge from external needs, the College has conducted research to determine how it can more effectively meet its stated urban mission: namely, to provide access for under-served adults who seek credentials to promote their own economic stability and professional growth in these changing times. A survey was conducted in childcare agencies to determine ways in which the College could assist in the retention and recruitment of new workers through the development of a career lattice offering economic and professional incentives. Working with agencies and another educational institution, the College designed appropriate educational programs to credential existing and prospective childcare workers. As a result the College has found a new student market and is joining with other collegiate units to address this need.

In another approach to develop new markets the College has examined its own program to identify programmatic components that could address the educational need of certain populations. This internal investigatory process also required the identification of qualified and available human resources for designing and delivering the program in another setting. The Assessment Program which is required of all entering students at CPCS has proved successful in helping students explore and interpret their life experience, identify their skills needs and plan an academic program to meet their career goals. This program has been recently adapted for off-campus delivery at General Electric Plant in Lynn, Massachusetts. A full-time faculty member has been identified and deployed to provide diagnostic assessment of skills, and is teaching the critical thinking and analytical skills required by the curriculum.

These new outreach efforts have made it imperative for the College to reflect on the appropriate goals for such activities. The College is now seeking new models of relationships with the private and public sector, to frame relevant projects to address the following goals:

1. To provide greater access for potential students who lack a sense of entitlement to higher education and have insufficient academic skills to do college-level work.

2. To develop new student recruitment initiatives to meet shifting enrollment targets resulting from increases in tuition and fees.

3. To meet the educational and skill needs of special employee populations within the public and private sectors.

4. To develop new funding mechanisms to support program development at a time of decreasing State funding.

Other institutions of higher education desiring to establish and enter new markets must initially develop their own goals with related criteria by which to evaluate the appropriateness of each new effort. Such criteria might include the relevance of the curriculum to the request, the expertise of faculty, the profile of the student/employee population to be served, costs, resource availability, and the short- and long-term benefits to the participants.

In the design and implementation process, the institution must determine the administrative unit that will initiate and guide the process through various stages of exploration and negotiation. Since the majority of these new initiatives will require the use of college curriculum and resources, the responsibility for this activity will most often lie in an academic administrative office.

The first step in determining the shape of the project in relation to the original request will require the identification of representatives from each organization. Once the decision is made to move forward, negotiations can take place among them to determine specific objectives and outcomes which are mutually beneficial to all parties. In the case of the General Electric program noted above, the negotiations revolved around several questions: which of the College's curricula could be delivered off campus, would employees matriculate as undergraduate students with tuition and fees paid by General Electric, and who would pay the on-site instructor? The union negotiator for this new program was an alumnus of the college and an employee of General Electric. He made the original request for a program to benefit fellow IUE Local 201 members who had been seeking further educational opportunities. The College's representatives in the negotiations were the Acting Director of the College's Labor Studies Program, the Director of Field Education, and the Associate Dean for Academic Affairs.

As stated above, the Assessment Program was chosen as the first offering to be delivered on-site at the Union Hall in Lynn. The employees/students were excited by the purpose of the Assessment Program as an introduction to college-level work as well as the fact that the program would take place in Lynn. The union agreed to pay instructional costs while individual employees/students were able to utilize the educational benefit program offered by General Electric. A written contract spelled out the roles and responsibilities of the union, College and students. The contract was executed between the business agent of the union and the chief administrative officer for administration and finance at the University of Massachusetts/Boston.

The Admissions Office of the University cooperated by offering an admissions seminar in Lynn for prospective employees/students. Based on a needs assessment of students the College's Assessment program was specifically designed to enable workers from both shifts to participate. The program began in spring 1992 and will be evaluated at the close of the current semester to analyze its effectiveness in meeting its stated goals. The second year can then be planned.

The General Electric program is an example of a successful marketing venture providing benefits for all participants: for students, access to the undergraduate program of the university in an off-campus setting which is not only more convenient but also more familiar; for the union, it offers appropriate support for members financed through the use of union funds; for General Electric, the development of an educated work force; and for the University, a potential pool of adult matriculated students without additional expense.

In cases where markets have been identified and interested parties have been contacted, but neither one has sufficient resources to mount a program, the approach must be different. In the aforementioned collaborative with Boston City Hospital (BCH) to meet the educational needs of entry level workers as they aspired to new mid-management positions, the negotiators from BCH and the College relied on external funding for support. A survey of Level 1 Boston City Hospital employees was conducted to determine their interest, skill level, barriers, and scheduling preferences. This data provided the necessary rationale for a proposal for funding a Critical Skills Program at the hospital. Research completed at the Associated Grantmakers Library in Boston revealed several potential funders for this project.

The College took the initiative to write a proposal to the U.S. Department of Education, Fund for the Improvement of Post Secondary Education to obtain the funds needed for this program. The negotiators for the College and BCH collaborated on writing the proposal describing desired goals and outcomes, and the possible adaption of the College's Critical Skills Program which would meet the needs of the identified employees/students.

This paper serves as an introduction to one college's approach to the development of new markets. The requests for new educational services for these potential new markets must be balanced against the effective delivery of the College's own undergraduate program. An imbalance creates tension that can be destructive to both efforts. Evaluation methodology for each venture must be developed to judge the appropriateness of the College's involvement in relation to the established goals and criteria.

INTEGRATING A PORTFOLIO PROCESS AND ADVANCED WRITING

William Giczkowski

A portfolio process which attempts to document experiential learning is often introduced to the student by means of a college writing course designed for that specific purpose. The curriculum for such a composition course will, of necessity, be shaped by the students' need to demonstrate college-level learning outcomes. Experienced writing teachers will notice that that goal transforms an ordinary composition course into something much more like a work project with a product at the end. Individual students will desire not only to learn something about good writing but also to earn units through the portfolio process. Writing instructors must be familiar with the theory of experiential learning as well as with the methodology for teaching composition.

Adult transfer students in some degree-completion programs satisfy part of their total unit requirements through a portfolio process which identifies and documents college-level learning outcomes derived from their own experience. Educators at schools which offer such degree-completion options have discovered that students do better in this process if they have had an introduction to the theory of experiential learning and at least some instruction which facilitates their re-entry into the world of academic writing.

These two objectives can be achieved in separate courses, but they can also be combined. An advanced writing course can combine elements of directed study, challenge-for-credit, and expository writing. Such coursework, because it is designed to do two or three jobs at one time, is likely to be comparatively more intensive and more demanding on teacher and student alike than other segments of the degree program.

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Experienced writing teachers will notice that the concomitant goals transform an ordinary composition course into something much more like a work project with a product at the end. The curriculum for such a composition course will, of necessity, be shaped by the students' need or desire to demonstrate college-level learning outcomes. Individual students will desire not only to learn something about good writing but also to earn units through the portfolio process, which would begin after the writing course is completed. Hence, integrating the demands of the writing course and the portfolio process requires, in general, a more carefully focused curriculum than in most writing courses. The students will be writing for specific objectives outside the composition course itself; and faculty members in various fields will be examining the essays produced in the writing class.

Students and writing instructors should, therefore, be provided with written criteria formulated by the faculty who evaluate the students' portfolio essays in each field where such a challenge is allowed. The writing instructors must make clear that they evaluate the students' work only as examples of expository prose and that the portfolio challenge is a process separate from the writing course which prepares the student for making that challenge. Writing instructors, talented though they may be, simply cannot be expected to have expertise in all academic fields.

The writing instructors should prepare the students in such a program to write expository prose acceptable as college writing. Since human experience is by its very nature interdisciplinary and since demonstrations of learning are almost always disciplinary, writing instructors will have to guide their students through a critical process of sifting and separating for the final portfolio product. Instructors need to ensure that students are prepared to expect different patterns of inquiry and hence differing writing demands in different disciplines. The passive voice, for example, might be preferred by a statistics professor but not by an historian.

Writing instructors teaching in such a program need to be familiar with the theory of experiential learning as well as with the methodology for teaching composition. Experienced teachers who have, however, never taught in such a program should be given sufficient orientation for the task demanded of them. Such an orientation might include appropriate readings on experiential learning and hands-on explanations of how the portfolio process works at that particular university. Most helpful for new instructors, however, would be some interaction and exchange of information with experienced portfolio writing instructors, who can share instructional strategies that work in accommodating the multiple objectives of the course.

Any class of re-entry students can be expected to have a wide range of writing ability or lack of it, not always apparent to educators after an examination of individual college transcripts. Indeed, some students who have had no undergraduate writing classes but have had to produce reports and memos on the job can be expected to write more expertly than those who have had two or three classes, especially if those classes happen to have emphasized creative writing rather than expository prose. On the other hand, some of those same students will appear to be heavily dependent on shop talk and the latest jargon expressions which give evidence of being on the cutting edge for their industry. Hence, writing instructors will have to work among all the mixed blessings that such a group of students bring with them into the classroom.

The instructors will have to manage the various weaknesses of individual students in writing and critical thinking. Some students may need extra work, for example, with pronoun reference problems or with parallel structure. Others may need a tutor because of continued basic writing problems. The writing instructor should be frank about the demands of the course and its limitations: a knowledge of basic punctuation and sentence structure should have been acquired in a basic course. Advanced writing has, fortunately or not, other objectives to be satisfied.

This approach, of course, implies that some students will have to work harder to catch up to the others if the final portfolio product is to be completed at the end of the course. And, yes, some students will have to drop out of the course or receive incompletes as grades for it. In this context, a group effort assumes a special significance because it can be critically supportive for all the students who might otherwise not complete on time.

Writing instructors, in addition to teaching something about writing, must exercise all the skills common to a project manager in industry. They must get a team working at the same time that they deal with each student as a special case. They must diffuse conflicts within the group and promote cooperation. They must reassure students that completion of the portfolio is possible, that students are awarded units, and that there is life after the portfolio.

A good way to begin such a portfolio-essay writing curriculum is with an initial assignment of autobiographical writing unencumbered by the additional demand for demonstrations of college-level learning outcomes. Instructors can provide students with a list of questions useful in stimulating autobiographical writing that is analytical. That list might include the following questions (adapted from *Interdisciplinary Writing and Critical Thinking*):

- Describe your most satisfying accomplishments so far.
- What have been the formative influences on your life? Describe any significant crises.
- At the present time, what is really important in your life? Have there been changes over the years in what is important for you?
- Describe your current job. Do you have administrative or supervisorial responsibility? Do you do hiring? Planning? Group presentations?
- What do you see as your strengths and weaknesses in job performance? In social relations? In your personal life?
- Have you lived in another state? Have you lived in another country for any length of time? Briefly describe how you have been affected by your travel experience.
- Do you have hobbies? What do you enjoy doing in your leisure time? Do you like reading? Writing? Sports? Music?
- Have you been active in community affairs? Politics or political causes? Church-related activities? Creative arts?
- What does a college education mean for you?
- Can you think of some differences between a college or university environment and the world of work? Explain in detail.
- Why have you decided to enter a degree program at this time in your life? What combination of circumstances made this decision possible?
- Describe any special training you may have had outside of university classrooms.
- Five years from now, where do you see yourself? What will you be doing?
- Do you plan on doing graduate work after you complete your undergraduate program? If so, in which field?
- On the basis of past experience what do you want to avoid in the future?

- On your wish list, what do you want for the future?

- Have you ever had the opportunity to spend some time analyzing your own experience? Explain.

Students should be encouraged to think of autobiographical writing as both selective and reflective. They should avoid trying to include every little detail. They might try instead to identify what has mattered over the years. A good first assignment might start not at the beginning of their lives ("I was born of poor but honest parents . . .") but with a life-changing experience--the discovery of love, the birth of one's first child, the pain of divorce, a confrontation with death, failure or triumph at work.

The first assignment might be about three pages long. It should not be of such a personal or private nature that it cannot be shared with the rest of the class. In fact, if students are instructed to prepare copies for everyone in the class, several instructional benefits will be shared as well. First, the wide range of experience and the wide range of writing abilities will be apparent to all. Second, a triggering effect will occur; one student's essay will remind others of half-remembered experience and perhaps illustrate a novel way to approach it. Third, the students will see that writing about themselves still requires some attention to the craft of writing itself: the writer must be in evidence, not only the diarist. And finally, students will begin to see that their own experience can be the raw material for an exciting and productive class without the intervention of textbooks, except as resource materials.

A longer autobiographical essay, perhaps ten to twenty pages in length, might follow the initial assignment. This longer essay might seek a thematic rather than a chronological organization and include several life-changing experiences. Writing instructors can then direct the students to areas of their lives that might prove fruitful for demonstrations of experiential learning.

The next stage in the instructional process would be to bring in the written criteria for a portfolio challenge. These criteria would have been developed in advance by faculty in individual disciplines. Writing instructors would then ask students to write autobiographical/experiential essays focused on those criteria. Instructors would explicitly emphasize expository writing skills over narrative or descriptive forms of rhetoric. Students would be encouraged to do background reading in the field using any authorities cited in the written criteria by disciplinary faculty.

At this point, students might be given copies of sample essays which were successful in the portfolio process. Teachers would, of course, have to get the written permission of the former students who have written them. It should be noted that many student veterans of such a portfolio process are quite willing to give permission to duplicate their successful essays: they usually are proud that a teacher might regard their work as exemplary.

Midway through this course, students are likely to feel intimidated by the amount of detailed writing expected of them. An effective way to let them know that completing the portfolio is possible and even satisfying is to invite a former student who has completed the process to testify and share with them. Students in the midst of writing for their portfolios will notice the former student's sense of satisfaction and enthusiasm for this kind of learning experience. In addition, they can ask questions, and the answers they receive have a special validity coming as they do from a veteran of the portfolio process.

Like all good writing, the students' portfolio essays will require several drafts. Since much material will be repeated in each draft, the teacher can ask that second and third drafts be identified as such and that changes and corrections be highlighted either electronically by a change of font or more humbly by a colored marker.

If all of the above sounds like a lot more work than an ordinary course in advanced writing, portfolio writing instructors can testify that that conclusion is accurate. They might also say that teaching such a course is likely to be among the most satisfying teaching experiences that they have had.

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WEAVING THE FABRIC:
TEXTUAL STUDIES AS AN INTERDISCIPLINARY PATTERN

Theodore Hovet
Grace Ann Hovet

During the 1991 fall semester, a group of colleagues from the College of Humanities and Fine Arts at the University of Northern Iowa met to consolidate their interests in critical theory and practice. They did so by proposing the creation of an academic certificate program in Critical Theory and Practice and the formation of an Institute of Textual Studies. Based on their own commitment to the study of contemporary theory and interdisciplinary practice, their past experience with the annual Iowa Student as Critic Conference, and their success in targeting certain General Education courses for interdisciplinary emphases, they had reason to believe they would receive encouragement from the administration for the certificate program and Institute. They did. They also received moral support from departments outside the college, particularly in sociology and business. The following report discusses the rationale for creating an interdisciplinary certificate program in Critical Theory and Practice and outlines the formation of an Institute of Textual Studies. It also provides background information on the Student as Critic Conference and nucleus of interdisciplinary efforts that led to the proposal.

Background

The University of Northern Iowa, with approximately 13,000 students and 700 faculty, retains its legacy as the original "teachers college" within the state of Iowa. Effective teaching remains central to its mission, and in an era when major paradigm shifts have occurred within and among many academic disciplines, a

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number of faculty have discovered that the study of critical theory and practice provides a way of understanding the significance and impact of these changes. Critical theory, in particular, challenges faculty to transcend their disciplinary methodologies. Critical practice, in turn, allows them to apply these overarching considerations to their own research endeavors and, more importantly, to their teaching.

In regard to teaching, the Critical Theory and Practice Group is convinced that the students--regardless of major or discipline--who are to be the leaders that shape our future are those who have developed an appreciation of critical theory and practice. In the words of our colleagues:

> Criticism is the most human act we perform, as it consists in living self-consciously in the world. Every judgment about what, how, and why we make the choices that we do, from moment to moment as our experience evolves, is a critical act. Self-awareness of the life we lead, and why we lead it, is criticism in operation.
>
> In a world of rapid change, instantaneous communication and crossing and recrossing art forms, it is doubly important that each citizen be a serious critic. Students who are not encouraged to be critics are in jeopardy of becoming single-medium or single-vision citizens, accepting uncritically any interpretation offered. What is judged and written about is experienced doubly and meaningfully. To think and write critically is to live in full consciousness of the principle of enjoyment. To criticize with competency and verve is to add these enhancing qualities to life itself."[1]

This proposal links our commitment to challenge students to think and write critically to an awareness of the central role that criticism plays in the social and political arena. As such, the proposal, in itself, weaves critical theory and practice into the fabric of contemporary life.

The Institute

The overall purpose of the proposed Institute for Textual Studies is to promote and augment textual studies. Textual is a truly interdisciplinary term since in contemporary critical theory it is used to denote how all intellectual discourse and aesthetic production (visual, oral, or written) is a woven fabric ("textile") of quotations, references, echoes, and reflections of other discourses. Thus we cannot study documents, public performances, or art objects within a single discipline but must "read" such texts by watching for and listening to the full range of cultural images and voices which are woven into their production.

The Institute of Textual Studies would call attention to the textual nature of human society and, hence, the central role that the humanities and fine arts play in understanding contemporary life as well as in the transmission of our cultural heritage. A core of faculty members have identified themselves as willing to serve in the Institute and, though a special building for the Institute would be desirable, an office site centrally located would suffice for beginning operations.

More specifically, this Institute would allow faculty members to consolidate in a formal way initiatives and activities already undertaken or planned. The intent of the program, as articulated by Dr. Mary Rohrberger, Head of the English Department, would be to 1) supervise the implementation of the certificate program; 2) encourage team teaching; 3) sponsor frequent faculty forums; 4) provide a liaison between the college and secondary school teachers; 5) work multicultural diversity into the curriculum; 6) provide travel and exchange opportunities for students; 7) promote faculty exchanges; 8) sponsor readings, film showings, and scholarly conferences; 9) provide practicums for the study of on-campus theater and music performances; 10) sponsor, produce, and edit scholarly journals and teaching materials; 11) provide a focal point, if desired by faculty, for the coordinating of the core of interdisciplinary General Education courses; and 12) pursue grants and other kinds of external funding.

The Certificate Program

The intent of the certificate program would be to enable faculty and students to study the latest developments in critical theory and practice in literature, language, art, film, theater, music, and communications. The program would also explore the ways in which contemporary critical theory connects the various disciplines in the college. Finally, it would seek ways of fostering dialogue between the college and community regarding the social significance of critical theory and practice.

The recently developed certificate program in Leadership Studies could serve as a model for the Critical Theory and Practice certificate program. Viewed as a program that complements a number of majors, the fourteen credit hour Leadership certificate was devised around a core of already existing courses; it consists of six hours of requirements, six hours of electives, and a two hour capstone course.

Four principles would govern the construction of the certificate program in Critical Theory and Practice:

1) "Interdisciplinary activity, valued today as an important aspect of research, cannot be accomplished by simple confrontations between various specialized branches of knowledge. . . . It begins effectively when the solidarity of the old disciplines breaks down . . . to the benefit of a new object and a new language, neither of which is in the domain of those branches of knowledge that one calmly sought to confront" (Roland Barthes, *From Work to Text*).

2) Critical practice is to be considered in its broadest sense, i.e., not only the evaluation and interpretation of various "high art" forms but also the evaluation and interpretation of the products of mass culture.

3) Critical practice not only addresses aesthetic principles but also the manner in which works of art and intellectual discourse are historically, economically, institutionally, and ideologically situated.

4) Critical practice explores how criticism is itself historically, economically, institutionally, professionally, and ideologically situated.

A Background of Commitment to Critical Theory and Practice

The idea to formalize the study of critical theory and practice by proposing an interdisciplinary certificate program and institute evolved in part from a perception a new College of Humanities and Fine Arts dean, Dr. Beverley Byers-Pevitts, and a new English Department head, Dr. Mary Rohrberger, had when they attended the Student as Critic Conference for their first time in 1991. In their view, the Conference, with its emphasis on criticism across the curriculum and its interdisciplinary procedures, suggested our readiness for a college-level program on critical theory and practice.

The annual Student as Critic Conference, founded in 1981, encourages and rewards critical thinking and writing in Iowa's high school students, college students, and high school English teachers. Each year, some 300 students from across the state have their essays selected for the Conference. When they arrive on campus, they meet in groups of five or six with faculty members who have read their essays in advance. Most of the faculty are from the English Department, but others from within the College and departments as diverse as Marketing and Curriculum and Instruction also participate. In the small group sessions, faculty and students alike discuss the topics of the essays--which can range from Marlow as narrator in Conrad's *Heart of Darkness* to social issues in *Apocalypse Now*--and evaluate the strengths and weaknesses of each others' critical approaches.

In addition, the best essays in each educational division are awarded prize money and publication. The interdisciplinary focus of the Critical Theory and Practice Conference is reflected in the award categories, which include literature, minority studies, the liberal arts tradition, American history, public policy, pedagogical practice, and a general topic category.

The Student as Critic Conference, with a ten-year record of successful and stimulating practice, was perceived as a "mini-version" of what could become, by extension, a sound academic program and approach.

The idea for such a certificate and Institute has a long prehistory in another area as well, namely, in the interdisciplinary components of the General Education Program. The required ten-hour Humanities sequence includes literature, history, philosophy, religion, art, and architecture. Elective courses in American Civilization, Non-Western Cultures, and Introduction to Literature courses (genre, performance-as-criticism, or foreign literature) also span the disciplines and encourage students to view the materials from multiple perspective. These courses are taught by faculty from various departments within the college (and the Department of History) and reflect the determination of faculty to augment interdisciplinary studies and the support of the administration in advancing their efforts.

In conclusion, we believe that an Institute of Textual Studies will weave together a tight interdisciplinary fabric out of already existing materials. Our immediate task is to continue the planning and begin designating existing courses that would become part of the program in Critical Theory and Practice.

Endnote

1. *Critical Thinking/Critical Writing: Prizewinning High School & College Essays*, 1989, 45.

THE NONTRADITIONAL DOCTORATE: A CHALLENGE AND A HOPE

Charles G. Hurst

Accredited nontraditional doctoral programs are a relatively new phenomenon on the American higher education scene, at least in terms of visibility. Among the major outcomes of national significance are the implications for increasing the number of minorities and women with the credentials required for faculty status. Similarly, a recent study reveals an increasing enrollment of senior level active Marine, Army and Air Force officers who are preparing for the next phase of our economic and military history as a nation.

A major problem confronting colleges and universities in the United States is the seriously limited number of African American and Hispanic educators with the doctorate required by most institutions for an appointment that may result in tenure. The situation has been critical for the past several decades, and graduation records of recent years and current enrollments indicate that improvement in the near future is not likely.

The ripple effect created by the problem of few African Americans and Hispanics with doctorates in most fields, and none in some, impacts to a significant extent on the efforts of many minority undergraduates to earn bachelor's degrees. The most frequently expressed complaint of such students enrolled in predominantly white collegiate institutions is the lack of teachers who are empathetic and with whom they can identify. The consequences, many believe, are the excessive dropout rates that contrast with the substantially higher graduation rates at historically African American institutions. Similarly, lack of the doctorate has been a handicapping factor in the competition for leadership positions in public school systems.

Reasons for the relatively small number of African Americans and Hispanics earning doctorates are a complex combination of economic, cultural and psychological factors. In addition, the performance records of graduate schools in recruiting

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and supporting the efforts of minorities are far from admirable. Similarly, few colleges and universities who hire minorities not having the doctorate are willing to involve flexibility, patience and financial support or paid release time. This entire paper could be devoted to these issues alone. But the primary purpose of the paper is to discuss a nontraditional alternative that holds singular promise if the barriers represented by tradition and limited perspectives can be overcome.

Fortunately, an increasing number of prestigious collegiate institutions are incorporating nontraditional alternatives at the graduate level: Executive MBAs have become common, weekend programs are numerous, and even the Wharton School of The University of Pennsylvania is introducing creative alternatives. At the doctoral level, Columbia University has implemented a two-year program featuring weekend study sessions and lectures.

Most dramatic, however, has been the growing presence of such creative doctoral level alternatives as the Union Graduate School, Nova University, and Walden University. Each of these attempts to meet the needs of mature adults in responsible positions who are unable or simply unwilling to follow the traditional path. Surprisingly, despite the positive response of the major accrediting groups, most higher education administrators are not aware of the newly gained accreditation or are unable to see a credible basis for equating the nontraditional doctorate with one earned in the traditional way at a traditional institution. What follows is an overview of the most recently accredited program, Walden University.

Walden University is an alternative for the doctoral pursuits of the full-time professional and enjoys continued development as an institution dedicated to excellence, and to concern for the human and academic needs of its students. For twenty years Walden has demonstrated its effectiveness, and created a dynamic alumni who are in leadership positions throughout the United States.

The university, founded in 1970 as a private, independent institution, came into being at a time when our society was undergoing rapid change, a condition which has only increased in magnitude and pace since then. Walden's program was designed for people who would perceive societal change as a lifelong learning opportunity.

In this, Walden was responding to the kinds of conditions that occupied the attention of the National Board on Graduate Education, a body called into existence in the early 1970's by the American Council on Education, the American Council of Learned Societies, the Social Science Research Council, and the National Academy of Sciences. One of the most outstanding results of this singular initiative is an enrollment that is two-thirds or more African American and Hispanic. Moreover, an increasing number of active military personnel with the rank of Captain, Major, Lt. Colonel and Colonel are enrolling to prepare for the next phase of their lives. It is quite apparent that this avenue of educational opportunity is addressing a major problem in a manner that holds great promise for meeting the needs of more minority faculty in higher education.

On March 19, 1990, accreditation was awarded to Walden by the North Central Association of Colleges and Schools. Since that time the institution has become licensed in a number of states, including Virginia and the District of Columbia (an action in process by the D.C. education Licensure Commission at the time of this writing). In addition, the institution is considering formal sites at military locations in the District of Columbia and Northern Virginia. The specific educational objectives of Walden University are:

1. **To create alternative graduate opportunities for adults.** To provide educational resources and programs on a dispersed basis to mature adults whose professional responsibilities, established families, and/or learning styles make attendance at traditional institutions difficult if not impossible.
2. **To conduct the curriculum through competency assessments of learning outcomes.** To create opportunities for students to demonstrate doctoral level knowledge and to complete a scholarly dissertation or project equivalent to educational outcomes in traditional graduate programs.
3. **To provide an adult learning environment based upon knowledge of adult development.** To help the adult learner understand himself or herself in the context of change, with lifelong learning as a perpetual ingredient in life planning and career development. Walden believes that while adults need to be specialists in a professional area, their fundamental need for the management of change within themselves and in society is for integrated, multidisciplinary, holistic knowledge.
4. **To enhance professional understanding with the knowledge of change.** To provide doctoral level education to professionals who want to enhance their understanding of change within their lives and within the areas of administration/management, education, health services and human services. Walden fosters scholar-practitioners who can both advance the state of knowledge and implement that knowledge in new applications.

Walden students are persons who have achieved a measure of professional success and who have already acquired knowledge at the graduate level in fields such as psychology, health, education, business and industry, government, or social service. Entering students typically are self-motivated, and many have already published scholarly and professional papers. They are learners accustomed to self-reliant learning styles, and they want an educational opportunity at the graduate level which does not require them to disengage from family and work commitments.

Walden currently offers two educational programs at the doctoral level:

1. **Doctor of Philosophy (Ph.D.)**
   Administration/Management
   Education
   Health Services
   Human Services

2. **Doctor of Education (Ed.D.)**

Within a program, doctoral student propose a professional specialization based upon their past course work and professional experience, their current professional roles, and their personal and career aspirations. For example, a personnel manager might identify personnel management as a professional track within the Administration/Management program. That student would design modules and assessments indicating doctoral level knowledge, and would pursue professional growth and development in the area of specialization.

Students demonstrate their academic and professional competence through learning activities assessed by faculty. These activities are individually negotiated between students and faculty within Walden guidelines. Academic credit corresponding to a semester credit system is awarded for demonstrated knowledge.

To graduate, a student must successfully complete:

1. A Professional Development Plan.
2. Curriculum assessments judged adequately by two readers in:
   a. Four Core Knowledge Area Modules demonstrating general knowledge and skills at the doctoral level.
   b. Three Advanced Knowledge Area Modules demonstrating comprehension and application of knowledge in a doctoral track (Administration/Management, Education, Human Services, Health Services).
3. A dissertation (Ph.D.) or Doctoral Project (Ed.D.) and a final oral presentation.
4. (Doctor of Education only) A supervised internship of 200 hours.
5. Complete residency requirements.

Dispersed Residency

Throughout the history of graduate education, "residency" has provided an opportunity for faculty and students to become a community of scholars. Traditionally this has meant that students have lived on or near a campus, but with today's capacities for networking, Walden has created several faculty-student contact points. In addition, formal and informal arrangements are made with other colleges and universities for students to use libraries and databases. In Virginia, for example, Walden students make extensive use of the George Mason University Library. Used extensively also by students in the Washington, D.C. area is the Library of Congress.

As a university without walls, the campus is dispersed throughout the country, throughout the year. Students take advantage of an array of services according to a plan negotiated with the Faculty Advisor. These dispersed residency services must include at least one summer session during the course of the program, and two regional intensive sessions per year.

Summer Intensive Session - The summer session is the primary group session for the Walden program because there are more faculty and more students gathered in one place for a longer time than at any other Walden session. Students are required to attend one 3-week summer session during their enrollment.

Regional Intensive Sessions - Regional intensive sessions are held on weekends in a variety of locations. They offer students an opportunity to work with faculty in addition to their own Faculty Advisor and to interact with other doctoral students.

Individual and Group Advisement - Individual meetings and telephone conferences occur frequently between students and advisors. Faculty residing in the same locale as a group of students will meet with them on a periodic basis throughout the year.

Sequence of Program

The three program phases which lead to the validation of a student's attainments and the award of the doctoral degree are:

PHASE 1: Admissions
PHASE 2: Assessment in Knowledge Areas
PHASE 3: Assessment of Independent Research

Admissions

Walden's admissions process focuses on selecting competent, self-motivated, responsible learners who are qualified for doctoral study. That selection process includes contacts prior to application, review of application materials, field interviews, admissions counseling, administrative reviews, and an Admissions Workshop.

Admission is based upon a careful review of each candidate's potential to complete the program successfully. A personalized analysis is made to appraise each applicant's background and potential. Admission is typically granted to applicants who have the Master's degree or its equivalent and three or more years of professional experience. Some atypical applicants are admitted who do not have a Master's degree, but whose backgrounds demonstrate an ability for doctoral study at Walden.

To begin the admission process, the applicant submits the following:

1. An application form, together with an application fee.
2. An official transcript from each college previously attended.
3. Two letters of recommendation attesting to the applicant's ability to pursue and complete advanced graduate work. These letters should be from educators or other related professionals who can make a current intellectual judgment of the applicant's readiness for graduate study, and must be sent directly from them to the admissions office.
4. A resume of employment, accomplishments, and education.
5. A statement of no more than five pages which describes the applicant's personal and professional plans for the future.

Applicants judged admissible by the Office of Admissions are invited to enroll and to attend an Admissions Workshop held periodically throughout the year. At the Admissions Workshop, which lasts several days, the professional competence of applicants is evaluated and a final admissions review is conducted by faculty. The Admissions Workshop represents the formal beginning of the Walden program. It affords an early opportunity for Walden to orient its new students in the extended campus approach to adult learning and assessment.

Assessment in Knowledge Area Modules (KAMS)

Students begin the academic program with the Professional Development Plan (PDP). The plan enables students to integrate their personal aspirations and goals with their doctoral program.

Students are evaluated for the breadth, depth, and application of their knowledge in each module through a series of written assignments based on readings. The assignments are evaluated by designated faculty members and reviewed by a second faculty reader.

Knowledge Area Modules include curriculum guides for each knowledge area to provide overviews for students as they conduct their study and arrange for assessments with the appropriate faculty. Each curriculum guide directs students to primary readings, to basic concepts and theories, to historical background and current trends, to the relation of the professional area to change, and to the assessment arrangements with a faculty member. The objective is not to make the student relearn what he or she already knows but rather to foster new learning that is built upon the background, career direction, and intellectual curiosity of the student.

Although each KAM identifies conceptual questions and issues appropriate for assessment, the student has considerable choice in identifying the particular interests and concerns in each KAM.

Students use Walden's summer session, regional sessions, local cluster meetings, individual advisement, and dispersed learning resources to help them complete this aspect of their academic program. When an assessment has been affirmed, the student's doctoral-level knowledge area competence is certified by the institution. All KAM assessments are kept on file for third-party review by those who want to evaluate or to recognize the quality of student work at Walden.

The Dissertation (Ph.D.) or Doctoral Project (Ed.D.) (18 semester units)

The final phase of study for Walden Ph.D. students involves preparation of a proposal followed by the design and execution of a research study, culminating in a dissertation. Walden does not favor any particular research design, but it requires a high level of conceptual manipulation of ideas. Walden expects its students to demonstrate knowledge of research design and the ability to interpret the findings of the research both orally and in writing. A doctoral committee, composed of two faculty, one external consultant/examiner, and a Dean, guides this phase of study.

The Ed.D. equivalent of a Ph.D. dissertation is a doctoral project that demonstrates the application of knowledge to an educational setting in such a way that other educators can benefit from the project, and involves a written description of doctoral-level quality. In addition to the project, Ed.D. students complete a supervised internship of 200 hours which relates to the doctoral project. When the doctoral committee judges that a dissertation or doctoral project is acceptable, a final oral presentation is arranged.

Knowledge Area Modules (KAMS) Core Curriculum (34 Semester Units)

The core curriculum is made up of four general modules which focus on a broad knowledge base important to all professions. It embodies the perspective of social concern which is unique to Walden.

Principles of Societal Development and the Future (8 Semester units)

The perspectives of sociology and other social sciences are considered as they influence human values and lifestyles, communication and social networks, alternative futures, and forecasting for the future. In completing this knowledge area, students will begin to integrate theoretical constructs into practical applications for their own interest areas.

Human Development (8 Semester Units)

This knowledge area explores basic theories and current research in stages of human development, transitions between stages, normal developmental patterns, and crises which occur. Students learn to explore developmental questions in the context of both chronological time and underlying physical, social and psychological experiences.

Organizational and Social Systems (8 Semester Units)

In this knowledge area, systems theories are introduced from a variety of disciplines. The primary models of structured system theories are presented as a background and theoretical framework for the other knowledge areas. Also considered in depth are theories which impact on micro- and macro-levels of social and economic systems.

Research Design, Methodology, and Theory (10 Semester Units)

Mastery of this knowledge area is required before Walden approves a student's dissertation proposal. Walden does not endorse one mode of research; rather, students are encouraged to pursue their personal and professional interests and explore the questions which appeal to them. Students are guided to resources which help them learn to conduct scholarly inquiry, to understand ethical and philosophical issues in research, to comprehend statistical concepts and procedures, and research designs. From this base of general research knowledge, students are encouraged to design competent research studies which address socially significant problems in a changing profession.

Advanced Curriculum (26 Semester Units)

Students choose one of the four doctoral tracks (Administration/Management, Education, Human Services, or Health Services.). They complete assessments in the three advanced KAMS related to that chosen track, demonstrating competence in depth/breadth/applied knowledge in each module.

Administration/Management

Advanced Knowledge Area Module I, Organizational Theory and Behavior (8 Semester Units)
From a variety of professional fields, knowledge is derived to enable students to develop an understanding of theories of organizations. Some specialized topics are developed to provide an in-depth structure for further study. Major current writers are studied extensively, and students are assessed in applications of organization theory related to change in their profession.

Advanced Knowledge Area Module II, Modern Approaches to Understanding and Managing Organization (8 Semester Units)
Management and leadership are explored in terms of managerial behavior, styles, and processes in organizations. This knowledge area considers structural issues and inter-organizational phenomena and interactions between the organization and its environment. The process and impact of change on organizations is the focus for student assessment.

Advanced Knowledge Area Module III, Advanced Case Study/Practicum in Applied Change - Administration/Management (10 Semester Units)
Utilizing theoretical constructs and models of organizational management from the previous two knowledge areas, students are challenged to apply these constructs to practical application through either a case study or a practicum format. For assessment in this area, students will design a case study or a practicum. The experience will have the students' professional growth and understanding of change in their profession as primary objectives.

Education

Advanced Knowledge of Area Module I, Theories of Learning and Motivation (8 Semester Units)
This knowledge area surveys the field of human learning with emphasis on needs, expectations, motivation, perception and communication as they pertain to learning and individual change.

Advanced Knowledge Area Module II, Administration and Planning for Educational Institutions (8 Semester Units)
Education as an institution has been a stimulus for social development over the past decades. Students study the body of literature about educational administration, and explore in depth the many possibilities relating education to change in their profession. This knowledge area includes examination in the profession as well as the societal consequences of professional activity.

Advanced Knowledge Area Module III, Advanced Case Study/Practicum in Applied Change - Education (10 Semester Units)
Utilizing theoretical constructs and models of human learning and educational practice from the previous two knowledge areas, students are challenged to apply these constructs to practical application through either a case study or a practicum format. For assessment in this area, students will design a case study or a practicum. The experience will have the students' professional growth and understanding of change in their profession as primary objectives.

Human Services

Advanced Knowledge Area Module I, Human Systems Theory, Planning and Management (8 Semester Units)
Students examine major theorists and schools of thought from a psychological and interactional perspective. The material in this knowledge assessment area provides a base for students in several human service professions. This knowledge area includes examination of the causes and effects of change in the profession as well as the societal consequences of professional activity.

Advanced Knowledge Area Module II, Intervention Strategies in the Human Service Professions (8 Semester Units)
Professions in the human service areas are continuously challenged by society as it affects individuals. This knowledge area provides assessment of intervention strategies for facilitating and initiating change in a therapeutic environment. Major schools of thought are studied and evaluated for their contributions.

Advanced Knowledge Area Module III, Advanced Case Study/Practicum in Applied Change - Human Services (10 Semester Units)
Utilizing sound theories and principles of human services planning, students derive an integrating experience to demonstrate the impact of human service systems or practices on society, and the impact of change in their profession on human services systems. For assessment in this area, students will design a case study or practicum experience. The practicum will have the students' professional growth and understanding of change in their profession as primary objectives.

Health Services

Advanced Knowledge Area Module I, Health Care: Theory, Management, and Practice (8 Semester Units)
This knowledge area uses interdisciplinary perspectives to explore major theories, management systems, and practice models which are currently used to provide health care throughout the world. Change in health care policies, delivery systems, public health issues, consumerism, and the future prospects for health care delivery are studied. Causes and effects of change in the health professions and societal consequences of professional activity are examined.

Advanced Knowledge Area Module II, Ethical Issues and Management of Patient Care (8 Semester Units)
This knowledge area uses interdisciplinary perspectives to analyze ethical issues in health care and to develop primary, secondary, and tertiary health care services for selected patient populations. New applications of health care delivery are studied. Special attention is given to theories and research which support models of interdisciplinary patient care delivery systems.

Advanced Knowledge Area Module III, Advanced Case Study/Practicum of Applied Change: Health Behaviors, Preventative Health Care, and Education (10 Semester Units)
This knowledge area uses interdisciplinary perspectives to provide an integrating experience which demonstrates the impact of health systems and practices upon society. Knowledge of change in the profession is demonstrated through analysis of theories and principles of health care delivery, health behaviors, preventative health care, and education for health care providers and consumers. A case study or a practicum experience is designed with personal growth and knowledge of change in the profession as primary objects.

It would be satisfying to end this paper on a wholly positive note, but the reality of tradition in higher education forces a moderated optimism. The response of many collegiate administration -- deans, vice presidents for academic affairs and some presidents -- has been largely negative. A study revealed one instance where a VPAA told a faculty member enrolled in a nontraditional doctoral program that failure to enter a traditional program instead would lead to termination. The faculty member refused to drop out and was terminated. Responses from most administrators were guarded, claiming at best to have inadequate basis for a favorable decision.

But yet the outlook is good. As financial necessity forces consideration of alternatives, there is no doubt that the movement toward acceptance of nontraditional doctorates will accelerate. In the meantime, evaluation of individual institutions and follow up-studies should be undertaken comprehensively by researchers in traditional collegiate institutions and such as the U.S. Department of Education. Financial support from private nonprofit sources appears to be a lively possibility.

AN INTEGRATED CURRICULUM USING INTERACTIVE LEARNING AND HOLISTIC PERFORMANCE ASSESSMENT IN A PRESERVICE TEACHERS' COURSE

Jann James
Lucinda H. Rose

This nontraditional/interdisciplinary approach to an interactive curriculum integrated knowledge from the social studies and the language arts disciplines. Learning environments with integrated activities using literature as the core were designed by undergraduate education students for multicultural, cross-aged children. Assessment for the university students and children was active and performance based. We focused on the quality of the experience and provided undergraduates with powerful performance assessment tools. These tools reflected learning, influenced intellectual behavior and self-concept, and made congruent classroom practice with content domains.

In creating a pedagogy which was both experiential and interdisciplinary, performance assessment was determined to be the most appropriate form of evaluation for the undergraduate students and the elementary children alike. The instructional methods allowed all participants to interweave knowledge, provide developmentally appropriate experiences, and realize the entire process as learning. Performance assessment was used because it was necessary to evaluate a range of products - writing, art, reports, presentations - that resulted from experiences which were active, process oriented, and open-ended. According to Stiggins (1988) performance assessment focuses on activity rather than on teacher-made or standardized tests where the growth of the active learning environment can be maintained by an on-going reliance on multiple measures. University students, the elementary children, and professors were all involved in a variety of assessment techniques moving the participants toward intellectual independence (Pappas, et al., 1990).

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In striving to adequately prepare undergraduate education students, modeling was an important component and most desirable when introducing all the instructional and assessment options of an integrated, interdisciplinary curriculum. Modeling gave the professors a unique opportunity to share in the evolvement of this new kind of curriculum.

The following six holistic affirmations served as the basis for the modeling:

1. We believe that our students should have a wide range of curriculum experiences in their education classes.
2. We believe that immersion into an interdisciplinary curriculum would allow for maximum learning about the integrated approach.
3. We believe that through this integrated interdisciplinary immersion our undergraduate students would recognize knowledge as interwoven, understanding as developmental, and the entire process as learning.
4. We believe our undergraduate students would become well-organized, aware of curriculum development, skilled in cooperative learning, and sensitive to the whole child.
5. We believe our undergraduate students would become empowered as teachers and learners and learners of learning.
6. We believe our undergraduate students should develop and use performance assessment that reflects learning, influences intellectual behavior and self concept, and makes congruent classroom practice with content domains.

Design

Through collaborative efforts, professors met and designed a new course by combining the language arts and social studies methods classes. Specifically this new course was named "Literature-Based Social Studies" (LBSS). With careful planning, teams of undergraduate students created twelve activity-based learning environments using literature as the core for integrated thematic units (Froese, 1991). These environments were created for cross-age groups of multicultural children ranging in ages nine through thirteen.

According to Vacca and Rasinski (1991), integrated thematic units on topics negotiated with students... in depth literature study, cooperative learning groups, and various reading and writing activities on important community issues relevant to the child, are a few of the steps to be considered in developing an integrated curriculum. Lukasevich (1991) describes the steps a teacher might go through in developing a unit of study (Figure 1). In addition to the style described by Vacca and Rasinski and the seven steps offered by Lukasevich, the LBSS course required one more step:

8. Develop and use performance assessment for all daily activities including those which introduce and culminate the thematic unit.

The LBSS summer course was scheduled over a five-week period. University professors met with the combined classes for four days, six hours per day. During each of these four days approximately three hours were spent in presenting integrated curriculum theory, performance assessment techniques, cooperative learning strategies (Slavin, 1991), and developmentally appropriate approaches to learning (Wadsworth, 1989). The remaining three hours were spent in cooperative learning activities engaged in by both professors and undergraduates when they actively constructed knowledge through participation. These presentations and activities served as models for all participants.

Using Lukasevich (1991) as our guide, we also brainstormed, semantic mapped (Bromley, 1991), set goals and objectives (Jacobs, 1989) and collected relevant resources and materials. We provided our undergraduate students with active learning methods (Woolever & Scott, 1988) and performance assessments for the integrated activities and experiences that were logically consistent with their goals and objectives. No textbooks were used.

On the fifth day (always on Friday) following intensive instruction and activity, the students reflected, evaluated, and discussed their needs relevant to team members and the topics chosen. Throughout the course these Fridays became known as "FRED DAYS" (Friday for Reflection, Evaluation, and Discussion).

In the weeks to come teams began their work with the children in the middle grades at a local county school. The undergraduates had twenty days to teach their integrated lessons and complete their planned activities. Obviously, the variety of topics not only appealed to the children but also provided the opportunity to apply the principles of a totally integrated curriculum, as well as multiple measures of assessment. Some of these measures included portfolios, learning logs, journals, videotapes, checklists, kidwatching journals (Goodman, 1985), and self-evaluation (Harp, 1991). Each team set up a learning environment area where the integrated activities would take place (Schwartz & Pollishuke, 1991). All materials, supplies, literature books, resource books, and displays were gathered by the undergraduates, so that they experienced the total "building" of an environment. In order for this to occur, teams had to cooperate, share responsibilities, share individual talents, and develop a professional collegiality to complete their environments.

Each team completed one planning and evaluation sheet for each activity in their lesson (Figure 2). This was part of FRED Day. Teams helping teams became the consistent behavior for problem solving. Learning was shared, fostering enthusiasm and commitment to the development of the new course.

Assessment

As discussed with the undergraduates from the beginning, their assessment would be performance based, just as they would evaluate the younger children engaged in the thematic units of study. The undergraduates were required to videotape segments of their children involved in the activities. Each undergraduate team and their children prepared a staged performance not only for the other teams, but also for the children in their school not participating in LBSS. This culminating experience provided the summative assessment (Harp, 1991) which reflected learning, changed behaviors, and which also assisted in interpreting progress made toward the goals of their thematic units.

During the final week, the undergraduates returned to the university setting. Here each team gave an overview of the integrated thematic unit for their classmates. The undergraduates conducted self-evaluations based upon the progress made toward their objectives. These presentations combined with the activity sheets and final assessment checklists (Figure 3) were the criteria used to assign grades to the undergraduate students.

Throughout LBSS, the professors kept daily journals assessing the application of teaching strategies such as cooperative learning (Watson & Rangel, 1989), questioning skills, brainstorming techniques, and the use of performance assessment measures all of which had been presented at the beginning of the course.

Without holistic performance assessment, it is quite possible that the university professors would have missed out on the most important element of all - personal change in themselves. They would indeed touch the lives of those who would someday be with tomorrow's children.

What specifically happened that enhanced the conditions for change to occur? Sharing brought about a change in the children. Children appeared to make sense of their environments by making connections between what they did and what they learned. For many of the children, this was the first experience in active learning. They were accustomed to passive, quiet learning and were surprised, and somewhat overwhelmed at first, to have so many options or choices. Once they realized that learning could be fun, they began taking risks, extending their creativity, relaxing and learning. Seemingly, the children learned by doing and not by what was done to them.

As professors we watched some of our students, traditionally conforming, growing in language and social development. We also saw children reaching out for "listeners" indicating they had not been previously appreciated as individuals. We hugged a lot of children who needed hugs, and they hugged us back.

We observed the catalyst of sharing that moved the undergraduate students from robot-like mannequins, dependent on professors for every move, to openly decisive, enthusiastic, preservice teachers. During this course, we saw growth extended in our undergraduate students: (a) from insecure, floundering and doubting to secure, direct, empowered and confident; (b) from separating subjects to integrating learning; (c) from superficial comments about children to in-depth, kidwatching techniques and observations; (d) from isolating their own learning to transferring their knowledge from one course to other courses; (e) from egocentric teaching to cooperative learning; (f) from little or no experience in actual teaching to real experience in teaching; (g) from spoon-fed students to independent thinkers; (h) from text-dependent, direction-followers to creative learners; (i) from rigid schedule keepers to flexible, adjusting students.

We also observed on the final FRED Day a tremendous growth in the knowledge of curriculum development and learning theory and a greater application of creative teaching methods. From this nontraditional experience, our undergraduates actively participated in a series of educational experiences including the following but not excluded to: cooperative learning, mapping/webbing, literature-based instruction, making Big Books, shared reading, group process skills and interaction, questioning skills, kidwatching, holistic evaluation, integrated-interdisciplinary curriculum, journals and learning logs, environments for interactive learning, lesson planning and presentation, developmentally appropriate approaches to learning, etc.

Conclusions

This interdisciplinary approach to curriculum combined knowledge from the social studies and language arts. This approach used literature as the core to integrate the curriculum. This curriculum was developed using thematic units which allowed the undergraduate students to interweave the knowledge, provide developmentally appropriate experiences, and realize the entire process as learning. We created a pedagogy that was experiential, interdisciplinary, concept-oriented, multicultural, and child-centered. We focused on the quality of the experience and provided our undergraduate students with powerful assessment tools - those which are developed and used by teachers in the classroom (Stiggins, 1988). Holistic assessment provides the appropriate and continuous attention to experiential learning and in turn changes the behavior which facilitates that learning. More importantly, a curriculum which values diversity will be one that applies this type of assessment for all learners.

1. Selection of an interesting theme around which to study other subject areas.

2. Brainstorm/web directions to take the theme. Consider how the theme can impact on the various subject areas through learning activities.

3. Set goals and objectives for the unit.

4. Collect relevant resources and materials.

5. Plan an introduction to the unit. Focus on developing student interests and questions about the topic.

6. Plan learning activities and experiences. Include activities for whole class, small groups, and individual students. Organize activities by subject areas or teaching strategies.

7. Plan a culmination experience. The experience should help pull together or summarize the unit of study for students.

Figure 1. Steps in Developing a Thematic Unit (Lukasevich, 1991)

Category(s):

Cognitive Level(s):

Activity:

Interest age level:

Content area(s) emphasis:

Objective:

Introduction: (Direct instruction? Webbing?)

Materials:

What the children did:

Comments - What happened:

Resources:
(books, equipment, exhibit, trips, visitors, ideas)

Figure 2. Activity Sheet

(Copyright, James, J., & Rose, L. H., 1991)

Team Name ________________ Date _________

Graphic Organizers

Semantic Maps
Comparison Charts

Activities and Experiences

Reading Aloud
Storytelling
Sustained Silent Reading (SSR)
Book Talks
Book Response Journals
Reading Conferences
Big Books
General Problem-Solving
Reading Strategies
Story Mapping
Song/Music Writing

Activities and Experiences

Journals
Group Composed Writing
Authors' Folders
Writing Conferences
Publishing Experiences
Displays
Book Making
Improvisation
Puppetry
Choral Reading
Video/tape recording
Other _________

Ongoing Assessments

Kidwatching
Portfolio
Learning Log
Checklist
Anecdotal Record
Daily Journal
Other _________

Check each activity or experience the team shared.

Other ______________________________

Figure 3. Final Assessment Checklist

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TWIN CHALLENGES AND SATISFACTIONS FOR BOTH THE UNIVERSITY STUDENTS AND THEIR PROFESSORS IN THE INTERDISCIPLINARY PROGRAM

Edythe Margolin

This paper focuses on four objectives: (1) the advantages of an interdisciplinary major in which the students have the option of choices from several disciplines designed to provide them with the information they need to become effective professionals who will be working with children, youth, and families; (2) the qualities inherent in a uniquely designed program for university undergraduates; (3) the challenge of integrating arts, sciences, and professional studies for a multicultural, urban population; and (4) thought-provoking concepts presented in the seminars by professors of the program.

Introduction

The richness of quality and substance available in an interdisciplinary program offers unique challenges for professors and students alike. Opportunities for adapting ideas and concepts that attract and interest students and professor are presented daily as the students pursue their specialist degree in child development. This paper touches on the ways that students find their way with professorial assistance among various disciplines, their principles, and concepts while applying those perspectives to work with children, youth, and families in field experiences they have in schools, community agencies or hospitals.

1. Design of the Program

University students who know they want to work with problems and issues related to children, youth, and parents can choose this program that offers them a list of choices from various disciplines and culminates in seminars focusing on the population they will want to help in a professional capacity. To provide them with

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some background on human beings, they have courses from psychology on self-understanding and insight, learning, motivation, concepts of critical thinking, and human adaptation to the environment. To give them an understanding of community issues, they may choose courses from sociology, social psychology, family environmental sciences, urban issues, Chicano, Pan African, and Asian studies. They receive preparation on the provision of creative experiences for children when they choose from among courses from departments of art, music, literature, drama, kinesiology or physical education.

The students are introduced to statistics in order to understand the literature in the fields of child development, family environmental sciences, kinesiology, psychology, and sociology. Throughout their course work, they are given the opportunity to do their assignments focusing on the population with whom they expect to interact. They are also given choices from a university-contracted and approved list to do field work with children, youth, and parents. In that urban and multicultural population, they apply the principles and theories they have learned concurrently while attending classes in the university.

Professors working with students in the advising process help them decide on options that are available to them so that the students' interests are captured into professional linkages. If a student is interested in a mental health orientation for children or youth, the student may wish to choose the Child Mental Health Option within the Child Development Specialist Degree. These students are interested in working with children who have been abused, who have emotional problems, who are in hospitals, or residential care agencies.

If students are interested in social work, the advising professor will recommend courses in that discipline or within sociology. Students who might also wish to concentrate on psychology may pursue another major or a minor in psychology while working on the child development interdisciplinary major. For professors who value individual differences among students, this opportunity is also a learning process as they find out about the fascinating array of choices, talents, and preferences of students. It is a two-way theme of satisfaction in the interactive process between professors and students.

Enhanced Qualities in a Tailor-Made Program

2. Student Interest and Professional Preparation in Interdisciplinary Work

Students are guided in terms of their current and future plans to choose courses that will assist them in actual day-to-day experiences with the population of their choosing. Since typically they have not been aware that a program such as this one exists, they are shown the possibilities of applying their long-term interests to the courses they have the opportunity to choose for their degree.

The students are introduced to courses and descriptions in the university catalog so that a linkage can be made between their professional goals and the disciplines offered in the university. Some students may wish to integrate the arts with the professional focus on children or youth. They can take those concentrations in part of the major as well as add them to the list of four elective courses of their choosing.

Students are not always aware of their own interests and skills until someone asks them questions about what they would like to do in their professional capacities. The students are typically delighted that someone is interested in what they as individuals would like to do. They are also learning about themselves in the process because they may not have thought of the questions before this moment. The advising session also provides the professor with information on ways to inject new ideas into the university program. Student interests and themes for the future arise in the context of discussion about the student's plans. This allows the professor to provide ideas and opportunities that can be available to the students. It also permits creative discussion between the professor and student as they both pursue more ideas that will enhance a student's future professional plans. It may include graduate work. It may embrace discussion on a variety of positions that will be open to a student because of his or her unique preparation in courses weaving the theme of child development through the student's professional repertoire.

Integration of Disciplines and Minority Populations

3. Minority and Multicultural Populations Integrate the Arts, Disciplines, and Professional Studies

Students from various populations in the urban environment have the advantage in this interdisciplinary program to prepare for professional work with children and youth while also integrating the fields of art, music, and literature with concentrations in science. Some Asian students, for example, may wish to combine an interest in the sciences with courses in the arts and use that knowledge for work with a client population as well as apply it to their own personal lives. Some wish to go back to their own countries and work for schools having the programs that will fit into their own interests.

Some students who are new to the United States are pleased to find that their own interests can be enhanced by learning more about disciplines of their choice while also preparing to be capable practicing professionals. They are surprised to find that their interest in children or youth can also be combined with desire to learn about science or the arts. They discover that their work in the interdisciplinary major in child development is an experience in self-growth, personality development, and intellectual enhancement as well as preparatory to an academic degree and profession.

Multicultural students from a country other than the United States and who currently live in an urban and cosmopolitan area are often overwhelmed by their new surroundings. For them, the experience of beginning course work and finding their way on a large university campus can be very perplexing. They do not know which way to turn to obtain the information they need or want. In many cases, they are not sure if what they want will even be available to them on a particular university campus. The experience is strange for them. Adaptation to the campus, professors, and students is not at all easy. An interdisciplinary program provides management choices for them. Some aspects of the program are sure to permit them the avenues of study they are seeking, thereby providing certainty of some kind as a starting point for them.

Challenges for Professors and Students in Seminars for Students Majoring in the Program

4. Teaching Designs in Culminating Seminars/Course

The content in the seminars offered to the students as a culminating experience in this interdisciplinary major is a challenge to the professors and the students alike. The variety of backgrounds in the students' preparation from courses of various disciplines must be considered by the professor guiding the seminar. The professor may assume that the students have some commonality in having had courses on the psychology of learning so that they know about human motivation, developmental processes of child development, and the life cycle of human development.

Differences in the students' preparation from interdisciplinary disciplines will be obvious, however, in terms of readiness for seminar discussion. Some of the students have concentrated more fully on some areas than others. For example, the student who has chosen psychology as a minor or another major within the interdisciplinary major, has more information about human development than another student in the seminar who has chosen to concentrate on the arts or family environmental sciences. About a third or less of the students in the seminar may be considering the pursuit of a teaching career in the kindergarten and elementary grades. They are interested in classroom practices and working with parents of the children they teach. Another group of students may want to work in a hospital setting with chronically ill children; some students may be interested in working as a legal advocate for children or youth in the juvenile court. Some students want to work with children or youth who have been emotionally or sexually abused.

The professor leading the seminar for these majors in an interdisciplinary program is challenged to meet their interests as the students' backgrounds are brought together in a culminating course. The seminars are intended to bring together what the students have learned from the interdisciplinary courses. With the guidance of the professor, the students are expected to integrate and transfer the knowledge from those courses to practical work with children and youth.

The students have also been prepared in a variety of ways to enhance and refine their own talents and skills relative to various disciplines of their choice. As they have studied young people's development and backgrounds, they have also become more insightful about their own personality and its development. They are interested in one another's work and contributions in class because other students' experiences provide an even broader opportunity to learn about children's development than would be possible without the interdisciplinary aspect.

Again, as in other ways discussed in this paper, the students and the professors are challenged and also receive satisfactions together as they pursue the work involved in an interdisciplinary program. The professor cannot assume certain course work has been understood or undertaken by the student prior to or concurrent with the two culminating seminars the student takes prior to graduating with a degree in child development. This information can become known either through student interest inventories filled out by the students or through autobiographies that students are willing to share. The professor is thereby challenged to arrange discussions and have the students write papers that will allow them the opportunity to discuss, enrich, and prepare for professional work in the areas of their choices.

An individual reading this paper might, at first, think the task in guiding a seminar of students who are completing work in an interdisciplinary major in child development may be too difficult. Containing a focus on the professional capacities in which the students will have to serve in the world outside the university may appear too broad and unmanageable. Yet it is not. Students know the population they wish to serve as does the professor of the seminar. The coherence of the seminars resides in the population of focus. The students will apply their individual choices of course in various disciplines to the way they work with children, youth, parents, and families. The unity of thinking in the seminar is brought together even though students have been bringing the principles and concepts from various disciplines to their own way of applying their knowledge to the population they will serve as professionals.

Summary and Conclusions

The strong satisfactions are obvious among the university professors who teach in this interdisciplinary major for students interested in the development of children and youth. Our program has dedicated professors who enjoy the variety of students' interests and talents. The professors are capably prepared in the field of human development. They are open to new ideas because they are continually hearing of new interests and hopes of the students. They are open-minded in thinking of new field experiences and locations of agencies that will permit the enhancement of the students' professional preparation in the program. The students have a program that is uniquely designed for their individual interests and skills. This ensures twin satisfactions for the professors and the students.

ALTERNATIVE COURSE FORMATS FOR THE ADULT EDUCATION MARKET

Richard J. Ryberg
Ian Dinmore
Richard K. Murray

The "student as customer" movement requires a variety of course formats and recognition of the needs and desires of students, especially working adults. A review of the Carnegie-based formats used by the University of Redlands will indicate some of the possible varieties. These formats respond to different student needs and imply a shift away from a simple focus on academic disciplines and traditional degree programs.

Introduction

The University of Redlands (U of R) is accredited by the Western Association of Schools and Colleges (WASC). It uses a semester-long course format in the College of Arts and Sciences, a traditional liberal arts program, while it uses alternative sequential formats in the Alfred North Whitehead Center for Lifelong Learning, the adult education arm. Common to both traditional and alternative course formats is the concept of a "unit of credit." Sometimes called a Carnegie Unit, the basic standard is 40 hours of combined seat time and study time for each undergraduate unit of credit and 45 hours for each graduate unit.[1]

The first part of this paper provides an expanded description of these course formats. The last part will discuss some aspects of how the delivery format relates to

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the U of R mission and the substantive elements of the liberal arts and professional programs.

Traditional Course Formats

It may come as a surprise to some that there are several traditional course formats. A conventional class meets at least once a week during a regular semester. In addition, at the University of Redlands a laboratory class is a conventional class with a lab session added once a week. In contrast, an Interim class may have an intense schedule with classes four days a week. The one common denominator is the Carnegie Unit: 40 hours of combined seat time and study time for each unit of credit.

TRADITIONAL COURSE FORMATS
College of Arts and Sciences

	Traditional	Interim	Lab (4 Unit)	Independent Study
Hours per Day	1	1 per Unit	1/lecture 3/lab	n/a
Days per Week	1 per Unit	4	3 lectures 1 lab	n/a
Weeks per Class	13 per Semester	4 per Interim	13 per Semester	n/a
Seat Time Hours per Unit	13	16	10 (Lecture)	n/a
Study Time Hours per Unit	27	24	21 (Excl. Lab)	40?
Study to Seat Time Ratio	2 to 1	1.5 to 1	2.1 to 1	n/a
Normal Load (Concurrent)	12-18 Units (4-5 courses)	3-4 Units (1 course)	(included)	(included)
Seat Time Hours per Week	12-18	12-16	(included)	(included)
Study Time Hours per Week	25-37	18-24	(included)	(included)
Total Time Hours per Week	37-55	30-40	(included)	(included)

We say a typical three credit conventional class uses a "traditional" format if it meets for an hour a day, three days a week. During our 13 week semester, this would result in 39 hours of classroom "seat time" or "contact." It also implies that the student would devote 78-81 hours of out-of-class "study time." This out-of-class time is only implied, it is not monitored. Some classes and some students may find they need more or less out-of-class study time.

This out-of-class ambiguity is a source of flexibility which provides for innovation. The first evidence of this is the laboratory course, even though it is not really innovative. A four credit laboratory class may have the same lecture schedule as a traditional class: an hour a day, three days a week. It also has a three hour laboratory each week for twelve weeks. This implies that the student would devote 85 hours of out-of-class study time: 160 total hours for the four units less 39 hours of lecture and 36 hours of lab. (There is no final exam on the lab portion and there is assumed to be no out-of-class study time.) The study-to-seat-time ratio is still approximately 2-to-1 if you exclude the lab sessions from the calculation.

A better example of innovation in traditional course formats is the Interim course. The Interim is a time of approximately four weeks between the Fall and Spring Semesters when students take only one course. It is particularly appropriate for travel and experimental courses. In a travel course, the students would spend four weeks full-time for four units of credit. No clear distinction is made between class-room contact and out-of-class study, although academic content must still be present.

A traditional course taught during the Interim tends to be very intensive and has an experimental quality to it. A common format is for a class to meet four hours a day, four days a week for four units of credit. This implies a 1.5-to-1 study-to-seat-time ratio, considerably less than the conventional WASC 2-to-1 ratio. Thus, the College of Arts and Sciences has used the Interim to experiment with course formats which compress the time for completing a course and which reduce the study-to-seat-time ratio.

The College of Arts and Sciences has not been lacking innovation. For example, there has been a long tradition with the Johnston Center for Individualized Learning. This program is organized on three principles: that self-direction is a motivating force, that written evaluations are highly effective means of conveying student performance, and that education can be made more effective by integrating the living and learning environments. These ideals are made concrete in individual courses by contract, in the graduation/contract review process, and an integrated administrative, classroom and living space.

It is also interesting to note another recent innovation at the College of Arts and Sciences to increase many three unit classes to four units without increasing the classroom contact. This innovation still complies with the WASC standard because the implied out-of-class study time increased from 81 to 121 hours. At the same time, the study-to-seat-time ratio is increased from 2-to-1 to 3-to-1.

Alternative Course Formats

The primary course format used in the Whitehead Center is known as an "accelerated" course. It is similar to the Interim format used in the College of Arts and Sciences in that students normally take one course at a time and that course may last four weeks. However, that is the end of the similarity. An accelerated course meets one night a week for four hours and a two unit course meets for four weeks and a three unit course meets for six weeks. This translates into eight hours of seat time for each unit, 32 hours of implied study time and a study-to-seat-time ratio of 4-to-1. A sequential series of accelerated courses defines a semester.

ALTERNATIVE COURSE FORMATS
Alfred North Whitehead Center

	Accelerated	Project Practicum	Weekend			Completion	ADMS (N/C)
			"A"	"B"	"C"		
Hours per Day	4	n/a	6	6	3 Fri. 6 Sat.	4	4
Days per Week	1	n/a	2 per Week-end	1 per Week-end	2 per Week-end	1	2
Weeks per Class	4-6 Weeks	Spread over 1 Year	2-3 Months	4 Weeks	2-3 Months	4-6 Weeks	14 Weeks
Seat Time Hours per Unit	8	12	12	12	9	8	14
Study Time Hours per Unit	32	28	28	28	31	32	26
Study to Seat Time Ratio	4 to 1	2.3 to 1	2.3 to 1	2.3 to 1	3.3 to 1	4 to 1	1.8 to 1
Normal Load (Concurrent)	2-3 Units	Overload	Overload	Overload	Overload	Completion (Overload)	n/a
Seat Time Hours per Week	4	0-4	4-16	10	4-13	4(8)	8
Study Time Hours per Week	16	0-3	16-25	30	16-26	16(32)	15
Total Time Hours per Week	20	20-24	29-30	40	29-30	20(40)	23

This format is accelerated in two ways: it is completed in a shorter time period and there is relatively less seat time for lectures. The four to six week class schedule is clearly different from a 13 or 15 week semester; the intensive study is not. The study-to-seat-time ratio is increased from 2-to-1 (or 3-to-1) to 4-to-1 which places a greater burden on the student to do guided readings and out-of-class work. Students (and faculty) need to be frequently reminded of these out-of-class expectations.

Paradoxically, it takes longer to complete a program using the accelerated format. For example, the shortest semester could be defined as a series of three four-unit courses, a 12 unit semester, with 24 weeks duration. A 16 unit semester would last 32 weeks. During a typical calendar year a student in an accelerated sequential program might only complete 20-24 units of credit due to vacations and scheduled breaks. The key, here, is the sequential nature of the courses in our programs rather than three to five conventional concurrent courses.

Adult students find the accelerated format very appealing. An accelerated program allows students to be defined as full-time even though they are only committing 20 hours per week to it. This also allows students to work full-time and meet classes outside the 8-to-5 work schedule. In addition, students like the fact that they concentrate on one subject at a time and the lock-step sequential program provides assurance that relevant classes are available. On the other hand, it takes two years to complete a 40 unit major and a bachelors degree requires 120 units. Adult students would like a program that can be completed in four calendar years from start to finish or that can be completed in two calendar years.

To address these concerns we have developed other alternative course formats to supplement the accelerated format. One is the Project/Practicum format. It is almost an independent study course and is the only course expressly designed to be concurrent with other courses. Scheduled class sessions spread out over the second year in the major to provide structured guidance for student research. These sessions, however, do not normally have a lecture format. The students develop a project proposal, complete it, then prepare and present a report. Students are expected to synthesize material from their on-going courses into their project/practicum.

Second to the accelerated course format is the "weekend" format. The weekend format actually has several variations. However, they share one thing in common: their schedule does not conflict with the accelerated courses in the major. The primary purpose of these courses is to give students an opportunity to elect courses for additional inquiry or to complete units for their degree. These courses may or may not be individually accelerated.

Weekend format "A" meets for six hours a day on both days of a weekend. There are 12 "contact" hours over those two days. The next class sessions are scheduled a month later and students are expected to complete their out-of-class study during those intervening weeks. Weekend format "B" is similar to Weekend format "A" in every way except when the classes are scheduled. They meet only on Saturday and a two unit course will meet for four consecutive weekends. Since the study-to-seat-time ratio is approximately 2-to-1, these formats are not considered to be "accelerated." However, it should be noted that these courses are completed in a shorter time period than the "traditional" format.

Weekend format "C" meets for three hours Friday night and six hours on Saturday for nine "contact" hours over two days. Like format "A" these weekend sessions are once a month and a three credit class meets for three months. The implied study time is 31 hours per unit for a 3.3-to-1 study-to-seat-time ratio.

The "completion" courses are essentially the same as the "accelerated" courses. The only difference is that these courses are not part of the required courses in the major sequence. These courses are intended as electives for students who have completed their major requirements and still need units. As such, they would be part of a normal load. Although students are not technically permitted to take them concurrently with other courses, many students register for completion courses on an overload basis to shorten the time to complete their degree.

The "ADMS" courses are a special part of our corporate program. It stands for "Academic Decision Making Seminar." These are non-credit courses for adult students who have been out of school for many years. The purpose of the course is to give the student an opportunity to start an undergraduate program with reasonable expectations and basic skills. These courses have the lowest study-to-seat-time ratio so students can get a high degree of counseling and supervision. This course is prior to the start of an undergraduate program that is offered to employees of a single corporation. At the end of the course, the students have more realistic expectations of what a college student does, and they will be better able to decide whether they are able to do college work.

Relevance to Mission and Quality Assurance

Courses using alternative formats "at convenient times and locations" readily lend themselves to a blend of "liberal arts and professional programs" as set forth in the University of Redlands mission statement.[2] Working adults (and their employers) may need and desire a college education but they are constrained by their employment. The conventional schedule effectively excludes most of these students. At the same time, these students have an extraordinary amount of employment experience which enhances both liberal arts and professional classes. Thus, there is no fundamental conflict between these alternative formats and the basic goals of a college education. To the contrary, there is much to be gained, especially from a conscious examination of our programs.

The value of a critique of any course format is the conscious attention given to course goals and programmatic quality. For example, if the goal of a course is for students to learn a wide range of basic facts and a basic vocabulary, it seems reasonable to recognize that "adult" students can accept a great deal of responsibility for learning outside the classroom. An accelerated format in terms of both study-to-seat time and chronological compression seems appropriate but a new syllabus and different textbooks may be required. On the other hand, course goals for students to learn reflective and integrative skills are hard to assess. Traditional college programs often assume without question that these goals can be achieved with the 2-to-1 ratio.

The use of alternative course formats, however, generates many tensions and problems related to quality assurance. The implied study time for the different course formats is at the root of many of these tensions. Clearly, there is nothing fundamentally right or wrong about any particular study-to-seat-time relationship. Yet, the reference to a 2-to-1 ratio in the WASC accreditation standards reflects some mystique for this standard. Courses which depart from this standard are singled out for special critique. While there may be traditional formats with essentially the same or even greater departures from this standard, comparison to counterpart formats may divert attention from some fundamental issues. This discussion clearly addressed questions of units of credit. The Carnegie Unit is the standard commonly used to at least frame the issues. Not clearly addressed are questions of the units for faculty load and quality assurance. The use of several course formats will create problems.

Each format will make special demands on faculty load. A low study-to-seat-time ratio puts great demands on faculty to prepare and cover important materials in class. It also increases the importance of classroom skill. A high study-to-seat-time ratio requires the faculty to prioritize the important materials for in-class discussion and to guide out-of-class study. It may also require faculty to spend more time grading homework. These demands are accentuated for a class that is completed in a short time period. Where there are several formats in use, there will be real and perceived inequities among the faculty.

The alternative formats may also accentuate concerns with traditional notions of academic freedom and programmatic quality. In a conventional 13 or 15 week semester there may be many opportunities for an informal academic review of both individual courses and major programs. However, there is little time or opportunity for review with accelerated courses in a sequential program.

Our experience has also shown some reluctance among full-time faculty members to use alternative course formats. Thus, courses based on alternative formats tend to make extensive use of adjunct faculty and this implies a need for more formal academic reviews. This may come in the form of standard syllabi or classroom visits. Whatever form it takes, there will be complaints about interference with academic freedom.

Endnotes

1. It is defined by WASC as follows: "One semester unit represents how much time a typical student is expected to devote to learning in one week of full-time undergraduate study (at least 40-45 hours including class time and preparation). Thus a six-week summer session might, if full-time, equate to six units. An alternative norm is one unit for three hours of student work per week (e.g., one hour of lecture and two of study or three of laboratory) for ten weeks a quarter or 15 weeks a semester. A full-time undergraduate program should normally be 14 to 16 units and, if full-time no less than 12 units. More time is expected to be devoted to study at the graduate level, typically more than three hours of study for every hour in class. . . ."

2. "The University of Redlands is a private, independent university committed to providing personalized education. . . For working adults, the university offers innovative programs at convenient locations and times. . . Redlands blends liberal arts and professional programs, applied and theoretical study, traditional majors and self-defined contracts for graduation. Small classes enable each student to participate in class discussion, to work closely with professors, and to receive extensive individual attention. Redlands remains sensitive to contemporary trends in society and challenges students to commit themselves to a lifetime of learning." Excerpt from the University of Redlands Mission Statement.

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NO, YOU'RE NOT A RANDOM NUMBERS GENERATOR: SOME INSIGHTS INTO HUMAN COGNITION AND DEMONSTRATIONS OF HUMAN PREDISPOSITIONS

James F. Sanford

Cognitive psychologists commonly view human beings as information processors. According to this model we receive information through our sense organs and pass some of it through to long-term memory, adding, deleting and modifying it along the way. More modification takes place as we access the information at retrieval. However, modifications are guided by existing knowledge structures, and people's responses are often predictable. Knowledge of these predispositions can be used in a number of informative and entertaining ways. This paper describes a demonstration and a quasi-experiment and reprints a story which have been used successfully in psychology classes to illustrate our biases and predispositions. The demonstrations may be used in related disciplines as well.

For the last thirty years the dominant framework in the field of psychology has been a cognitive one. Psychology has increasingly become the science of mental processes and structures rather than the science of behavior. Unlike the earlier behavioral approach, cognitive psychology allows us to extrapolate beyond the observed behavior and attempt to identify the underlying mental processes and structures associated with it. The mind is now available for study.

Within cognitive psychology most researchers have adopted an information processing model. This model assumes that humans act on incoming information through a series of stages, modifying the content and form of the information along the way. Borrowing liberally from information theory and computer science, the information processing model assumes that mental structures are fluid and constantly changing as new perceptions and new ideas modify previous knowledge. For example, as you read this paragraph, the information that it contains should change your conception of psychology. Your previous knowledge structure regarding

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psychology will be modified by the new information on these pages. Yet some new information will not be incorporated into the modified structure. Information which is inconsistent with previous knowledge or which is considered unimportant may be rejected. Our understanding of the world involves a synthesis of new and existing information.

As a result of the interplay between new information and existing knowledge structures, certain cognitive biases or predispositions emerge. Obvious examples of these predispositions come from proofreading, where very frequently the repetition of a word at the end of one line of text and at the beginning of the next line will be missed, or where two letters inverted in the middle of a word are overlooked. In these cases the proofreader's expectations based on existing knowledge structures and the context of the words and sentences overshadow the ability to consciously notice the printing errors.

These predispositions can be shown in any number of entertaining and instructive ways. Numerous demonstrations, quasi-experiments, and stories or parables can illustrate the biases and imperfections of human information processing. For the remainder of this paper I will describe three which I have used successfully in my psychology classes and discuss their relationship with human information processing. The demonstrations discussed below are, as far as I know, original as class demonstrations, although two of them are based on published information. Many others can be found in instructors' manuals for introductory psychology textbooks.

Humans and Random Selection

Human beings are incapable of random selection. Random sampling requires that each event in a population be equally likely to be selected in a sample. But if we want true random selection we need a coin, some dice, a random numbers table or a computer because humans don't select on a random basis.

To illustrate this write the numbers "1," "2," "3," and "4" on the blackboard and ask each student to choose one of the numbers. Then have the students who selected "1" raise their hands, followed by those who selected "2," etc. Keep track of the frequencies in each case. The reliable outcome is that almost nobody will choose "1" (my long-term average is probably less than five percent of the class), ten-to-twenty-five percent will choose "2," and another ten-to-twenty-five percent will choose "4." More than half, and often as many as two-thirds of the class will choose "3."

This demonstration can be extended, although the outcome is less reliable, by having students repeat the task after the initial demonstration. Two outcomes are common. First, most of the few students who initially chose "1" or "2" will choose "3" or "4" the second time, and students who chose "3" or "4" will now choose "1" or "2." We seem to be predisposed to "balance" our choices so that the average position of our selections falls near the middle of the sequence. The second common outcome is that very few students' second selections will be the same as their first. If people were truly able to select randomly, each selection would be independent and not influenced by earlier choices.

Humans and Limited Processing Capacity

In 1956 George A. Miller published one of the most influential papers in cognitive psychology. In this paper Miller pointed out that people are limited in the amount of information that they can process at any one time. His conclusion was that the limit is about seven plus or minus two "chunks." He based this conclusion on observations that only about seven items (words, numbers, letters, etc.) can be remembered in running memory span and that, if a number of items is shown simultaneously for a very brief period of time (e.g., 50 milliseconds) on a tachistoscope screen, humans can accurately count the number only up to about seven. If more than seven items are present, people consistently underestimate their frequency. A "chunk" for Miller is a psychological, not a physical, unit of measurement, and a chunk can be very small (e.g., a single letter) or much larger (e.g., several short words that are processed together). Thus, Miller proposed that people increase the amount of information which they simultaneously process by increasing the size and complexity of their chunks, not by increasing the number of individual chunks they deal with.

Robert S. Miller illustrated the concept of chunks and limited processing capacity in an allegory which was published in a book by Reynolds and Flagg (1977). The allegory describes the travails of world traveler Lady Manchester as she tries to persuade the captain of a tramp steamer that the 264 (plus or minus 2) items on her well-endowed back are really just five chunks of luggage. It is reprinted in Appendix 1 and presents an entertaining and informative example of George Miller's ideas.

Humans and "Basic-Level" Processing

In 1976 Eleanor Rosch and her colleagues (Rosch, Mervis, Gray, Johnsen, & Boyes-Braem, 1976) demonstrated that humans use a basic, or middle, conceptual level when processing and storing information. They concluded that we usually think at a level intermediate between the gross superordinate category and the specific exemplar/subordinate category. For example, we tend to think of a "dog" rather than a "mammal" or a "cocker spaniel" if we see a four-legged animal sniffing around a fire hydrant. In similar fashion we tend to process information at the level of "hammer" rather than "tool" or "ball-peen hammer" and "car" rather than "vehicle" or "Ford Taurus."

The Rosch, et al. study involved presenting category headings at three levels (superordinate, basic, and subordinate) and having subjects list attributes of each heading. The investigators then looked at the number of attributes which subjects identified for categories at each level and at the frequency with which attributes were shared across category level. For example, "has four legs" might be listed as an attribute for both "dog" and "cocker spaniel" category headings.

Rosch's et al. results showed that fewer attributes were listed for superordinate than for either basic or subordinate categories and that basic and subordinate levels produced a great deal of attribute overlap. They concluded that the superordinate level fails to provide the richness and detail needed to differentiate categories. In addition, the subordinate level consists of features which are largely redundant with each other and with features of basic level concepts. Thus, thinking in terms of "mammals" does not allow us to differentiate the many types of mammals with their varied features. However, thinking in terms of "cocker spaniels" requires us to think also in terms of "boxers," "dalmatians," and "German shepherds" when many of the attributes of these three categories are the same and the same as attributes of "dogs." This redundancy would require considerable extra effort and storage capacity as compared to thinking in terms of the basic-level category "dog." Understanding the world at the basic conceptual level allows us to both have the rich detail necessary to differentiate concepts and the efficiency to keep from overloading our storage and processing capacity.

Basic-level conceptual analysis can be reliably illustrated by a mini-replication of the Rosch, et al. study which is easy to use in a classroom. On separate sheets of paper write "fruit," "apple," and "red delicious apple" and copy enough sheets that each student receives one. Then hand out the sheets face down to the students ensuring that about one-third of the class receives each category heading. Instruct the students that when you say "start" they are to turn their papers over and write all the attributes they can think of which are associated with the terms at the tops of their papers. Give them about two minutes to complete the task. At the end of this time find out from each student how many attributes he or she listed and record the frequencies. After all students' responses have been recorded compute the average number for each of the categories. Rosch's, et al. finding, i. e., that fewer attributes will be listed for "fruit" than for "apple" or "red delicious apple," will almost always be replicated. You may also ask students if they thought of any other concepts as they were writing their attributes. Commonly, students who were responding to the "red delicious apple" category will say that they thought of "apple" and students responding to "fruit" will identify several types of fruit which they thought of while listing their attributes. The "apple" responders will use only "apple." Finally, if time permits, you may have students name the features they listed and count the number of times that features overlapped between categories. As Rosch, et al. found, there will almost always be substantial overlap between features listed for "apple" and "red delicious apple."

Conclusion

The theme of humans as processors of information has been extremely fruitful in helping cognitive psychology understand human perception, memory, concepts, and decision making. The information processing framework has helped us to understand that, as people gain experience in the world, they develop certain biases or predispositions. And, while individuals' cognitive structures are different, certain commonalities in information processing exist and can be understood by empirical observation. As instructors in psychology and related disciplines help their students understand human cognition, a number of demonstrations, quasi-experiments, etc. are available to illustrate some of the foibles and imperfections of the human information processing system. As they are used in the classroom, these demonstrations can illuminate our cognitive biases and limitations.

Appendix

"An Allegory" by Robert S. Miller.
Reprinted from Reynolds, A. G., & Flagg, P. W. (1977).
Cognitive Psychology. Cambridge, MA: Winthrop.

Lady Manchester decided to emigrate, it being the fashionable thing to do that season, for Lady Manchester was always the height of fashion and quite adaptable to any vogue. Besides being the height of fashion, her ladyship was also the epitome of thrift and economy; but then, after all, fortunes the size of hers are seldom accumulated in any other way. So in her typically economical manner, her ladyship arranged for her journey, third-class accommodations on a tramp steamer. The primary distinction between such accommodations and the more expensive variety was in the amount of luggage that one could bring along; the first-class passengers were allowed virtually unlimited cargo, while the third-classers like her ladyship were instructed, "You may bring only five things with you on the ship." As we shall see, however, this was to prove no disadvantage at all to Lady Manchester, for besides being the height of fashion and the epitome of thrift, she was cleverness personified.

When Lady Manchester began boarding the liner carrying on her back two Siamese cats, 91 steamer trunks, an arthritic kangaroo, 5 marble statues, an upright piano, a pair of matched zebras, 83 suitcases, 5 Picasso sketches, a Louis XIV sofa, 12 quarts of goldfish, an autographed picture of George Miller, 19 wardrobe cases, a velvet-covered wing chair, 3 Oriental rugs, an electric popcorn popper (with cord), 25 volumes of *The Journal of Rude Behavior*, a hospital bed from the Leominster Leprosarium, a bronzed computer terminal (John Kemeny's baby terminal), a copy of *Your Complete Helen Keller Jokes*, 7 (plus or minus 2) ancestral portraits, and a mideastern tapestry, she was stopped on the gangplank by the captain himself.

"My dear ladyship," the captain began. "You can't be planning to bring all that onto my steamer. Surely you will recall that as a third-class passenger you are entitled to bring only five things."

"My dear captain," Lady Manchester replied, "but five is exactly the number of things I have here."

"Come, come," said the captain. "Surely you take me for a blind man if you expect me to believe that. Why at quick count I'd say you have about 264 plus or minus 2 items here on your back." (It might be noted here that her ladyship's back

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was renowned for its strength, while for his own part the captain was a celebrated idiot savant of rapid computations.) "Take for example the suitcases, trunks, and wardrobe cases you're carrying," he continued. "Why there's 193 things right there."

"Heavens to Mergetreud," Lady Manchester exclaimed, for she was not above an occasional vulgar exclamation. "You misperceive the situation completely. Those together are but one item."

"But I don't understand," the captain protested.

"My good man, together they contain my entire wardrobe. They are *in toto* one item: my clothing. Surely you can conceive of that as a single unit, can you not?"

The captain had to admit that he supposed he could.

"My clothing then, is thing number one."

"But all those vicious beasties: the arthritic kangaroo, the two Siamese cats, the pair of matched zebras, and the 12 quarts of goldfish?"

"My pets of course: that's thing number two."

"And the upright piano, the velvet-covered wing chair, the Louis XIV sofa, the three Oriental rugs, and the hospital bed from the Leominster Leprosarium, I suppose those aren't seven separate things either?"

"Of course not, dummy," her ladyship replied, for the captain was being a bit slow. "This is my furniture, or some of it at least, and that's thing three."

"And I suppose the five marble statues, the five Picasso sketches, the seven (plus or minus two) portraits, and the mideastern tapestry is your art collection and thing number four?"

"Now you're catching on."

"But what about the autographed picture of George Miller, the electric popcorn popper (with cord), the 25 volumes of *The Journal of Rude Behavior*, the bronzed computer terminal and the copy of *Your Complete Helen Keller Jokes*--surely these are separate things. Surely they have nothing in common. They are not one. You have indeed then exceeded your cargo limit."

"Idiot!" her ladyship exclaimed, for she was now becoming rather annoyed and slightly fatigued from holding all these things upon her back all this time despite her celebrated strength. "Of course they're one thing. They're one because I think of them as such. You may call them left-overs if you insist on a word. They're all those things that are left over from the other four and as such they are a unit. Were you not such an incurable imbecile you'd see at once that I have on my back precisely five things: my clothing, my pets, my furniture, my art, and my leftovers. Or if you prefer I could argue that I have precisely one thing with me, my luggage, and demand a rebate." With that Lady Manchester pushed aside the bewildered captain and boarded the steamer. As she did so she muttered, "Fool, imbecile, idiot--you'd think a system of chunking that was good enough for my short-term memory would be good enough for him!" And indeed one would have, for her ladyship's short-term memory, like her strength, her fortune, her fashion, her economy and her cleverness, was world-renowned.

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AN EMPIRICAL ASSESSMENT OF THE ADAPTIVE BEHAVIOR OF GAME PARTICIPANTS IN A MARKETING SIMULATION GAME

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A controlled experiment based on two experimentally manipulated environments was used to investigate the nature and the extent of the adaptive behavior of participants in a computer-based marketing simulation game. Very little appropriate adaptive behavior is uncovered. Furthermore, when such learning occurs early in the game, there appears to be a minimal degree of learning stability. When such learning occurs late in the game, the degree of stability is uncertain.

Introduction and Past Research

Simulation games, a common experiential learning tool in business programs, allow the participant to integrate material from across subject fields (e.g., marketing, finance, accounting, production, management, economics, mathematics, psychology). This may be why over 95 percent of the AACSB business schools (Faria, 1987) use this mode of learning, drawing from the over 200 games on the market (Horn and Cleaves, 1980). What is not clear, however, is whether students learn how to make effective decisions using this time-consuming experiential learning approach.

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Even though simulation games are widely accepted, the effectiveness and validity of this learning tool has been of concern. The effectiveness of simulation games has been addressed in dozens of empirical studies, as summarized in three major reviews (see Greenlaw and Wyman, 1973; Keys, 1976; Wolfe, 1985). Game validity has also been a focus of research (see Mehrez, Reichel, and Olami, 1987; Whiteley, Faria, and Dickinson, 1991; Wolfe and Jackson, 1989). The present study continues this research focus by conducting a controlled experiment which investigates the degree and nature of participant adaptive behavior during a simulation competition.

Purpose

While a number of factors can influence the decision-making process of game participants (e.g., game dynamics, a changing company, competition, game objectives, participant capability), the simulated environment with which the participants must contend must also be considered. If game participation is a valid learning experience, then decisions which are consistent with the environment should occur. And if such adaptive behavior does occur, when during the game does such learning take place and how stable is it?

Experimental Environments

The concerns of the study were investigated using a controlled experiment with the marketing game entitled "LAPTOP: A Marketing Simulation" (Faria and Dickinson, 1987) in a principles of marketing course. To simplify the decision process during each period of play, the players were only required to complete the 12 decision areas for the Deluxe laptop computer in Territory 2 of this two-product/two-territory game. Twelve research reports could also be ordered.

For this experiment, the game parameters were manipulated so as to define, from a marketing perspective, two theoretically meaningful and distinctly different environments. One of the environments rewards the use of a "pull" strategy; the other rewards the use of a "push" strategy. The focus of a "pull" strategy is consumer demand stimulation; the focus of a "push" strategy is the enlistment of channel co-operation to achieve market distribution (Keegan, Moriarty, and Duncan, 1992).

A pull-strategy rewarding environment was created by setting parameter importance at the maximum level of 10 for (low) price, (high) broadcast advertising, and (high) print advertising. The default weight of 5 was used for the sales promotion decision area, since the only concern is whether the pull environment companies make use of the sales promotion approach of premiums. The minimum importance value of 1 was assigned to each of the (push) variables of (high) trade advertising, (high) co-operative advertising allowances, and (high) sales force size in the pull environment. The default weight of 5 was used for the point-of-purchase (P.O.P) and trade show sales promotion areas, since the only concern is whether the push environment companies make use of either or both approaches. The default value of 5 was also assigned to the message type, product quality (R & D costs), sales force salary, and sales force commission parameters. No parameter weights were required for the shipment (units) decision area. (The latter five decision areas were not investigated.)

In order to create an environment which would reward the use of a push environment, the importance values of 10 and 1 were assigned to the parameters in a manner opposite to that used in the pull environment. The default value assignments were not changed. The push environment companies are expected to use the point-of-purchase and trade show sales promotion approaches but not the premiums approach.

Parameter assignments were not required for the marketing research area, since a company only needs to request such information. The pull environment companies are expected to request price information (exact and/or average) and the push environment companies are expected to order co-operative advertising allowance and sales force size information.

Hypotheses

The general hypothesis is that, if marketing strategy formulation in a simulation environment is an internally valid experience, then the nature of the decisions should be consistent with the importance and relevance of the strategy components. In the present study, the specific hypotheses are as follows:

> For the participants in the Pull environment, the average price (H1), the average trade advertising expenditure (H4), the average co-operative advertising allowance percent (H5), the average territorial sales force size (H6), the average per company selection rate of the sales promotion approaches of point-of-purchase materials and/or trade shows (H7), and the percentage of companies requesting co-operative advertising allowance research (H10) and sales force size research (H11) will be *lower* than the corresponding values for the participants in the Push environment.

For the participants in the Pull environment, the average broadcast advertising expenditure (H2), the average print advertising expenditure (H3), the average per company selection rate of the sales promotion approach of premiums (H8), and the percentage of companies requesting average price and/or exact price research (H9) will be *higher* than the corresponding values for the participants in the Push environment.

An examination of Hypothesis 7 reveals that it has been structured to indicate that only a single type of sales promotion can be selected per period. Similarly, Hypothesis 9 has been structured to indicate that requesting either form of price research is sufficient.

The investigation of the general hypothesis reflected by the 11 specific hypotheses requires a between-environment comparison based on 11 dependent variables. In all cases, except for the very first period of play, the same analysis will be carried out for each period of play, with a specific focus on identifying between-environment decision-making trends.

For Trial Period 1, the hypotheses need to be modified to reflect the expectation of no significant between-environment differences. This modification is appropriate since all of the players were starting from the same game-level knowledge point and since all participants were randomly assigned to an environment and were oblivious to the fact that an experiment was being conducted. Differential decisions would not be expected to evolve until the second trial period.

Methodology

The study was conducted using the forty-nine undergraduate students enrolled in a 10-week principles of marketing course as game players. The participants competed on the basis of relative earnings per share and relative market share (weighted equally) for 20% of the course grade. A 5% game report was also required.

Ten industries, each consisting of 5 directly competing, randomly assigned, single-player companies were formed and assigned to an environment on a random basis [four to the push environment (20 companies) and six to the pull environment (30 companies)].

Even though 50 companies were formed in the game, the number of actual participants per period varied from 47 to 49. One company had to be operated as a dummy company for the entire game and two additional such companies were operated during Trial Periods 1 and 2 (decision values obtained from the LAPTOP manual). After Real Period 4 and 5, one student each time dropped the course. The final decisions for these companies were used for the remainder of the game. The data for the non-participant and dummy companies were omitted during the analysis stage of the study.

A ten decision-period game was conducted. During the second week of the course, two no-risk trial decisions were made (Trial Period 1 and Trial Period 2) in order to allow the players to become familiar with the game. Then, a new game was started, but the environment and the competition faced by each company during the trial periods remained the same. The new game (i.e., Real Period 1 to Real Period 8) consisted of six weekly decisions and two bi-weekly decisions.

Results

Statistical Analysis Approach

The data for Trial Period 2 and Real Period 1 to 8 were analyzed using an independent, one-tailed, t-test. This approach is appropriate since each decision area involves theoretically unrelated variables, even though some variables may be statistically correlated (see Biskin, 1980, 1983); the importance weights were set independently by the game administrator; and the hypotheses for these periods are directional in nature (see Tabachnick and Fidell, 1983). The data collected for Trial Period 1 were analyzed using an independent, two-tailed, t-test since no between-environment differences were expected during this period.

Tests of Hypotheses

The results for Trial Period 1 are as expected (see Table 1). In all 11 decision areas, no significant differences between environments are evident. For the remaining nine decision periods (i.e., Trial Period 2 to Real Period 8), there is very limited support for the hypotheses. Only the results for Hypotheses 1 and 5 are somewhat as expected. For three of these nine periods, the companies in the pull environment had, as expected, a significantly lower average price than did the push environment companies (H1). And for four of these periods, the companies in the pull environment had, as expected, a significantly lower average co-operative advertising allowance percent than did the push environment companies (H5).

Other, yet sporadic, consistent results are revealed in Real Period 2 for Hypotheses 7 and 8 and in Real Period 8 for Hypothesis 2. In Real Period 2, as expected, the average per company selection rate of the sales promotion approaches of point-of-purchase (P.O.P.) materials and/or trade shows for the pull environment companies was significantly lower than the corresponding average for the push environment companies (H7). Also, in Real Period 2, as expected, the average per company selection rate of the sales promotion approach of premiums for the pull environment companies was significantly higher than the corresponding average for the push environment companies (H8). In Real Period 8, the average broadcast advertising expenditure for the companies in the pull environment was higher than the corresponding average for the companies in the push environment (H2).

No between-environment differences are evident for print advertising expenditure (H3), trade advertising expenditure (H4), sales force size (H6), and the percentage of companies requesting average and/or exact price research (H9), co-operative advertising allowance research (H10), and sales force size research (H11).

Discussion and Conclusion

Overall, the results indicate that the players in the pull environment were not making very many decisions which were significantly different from those being made by the push environment participants. Only for 10 of the 96 meaningful comparisons for Trial Period 2 to Real Period 8 are the expected differences obtained (no research requests for either environment were expected for the final period -- of no value).

When the expected differences were obtained early in the game for the price variable (see H1), such differences lasted only for three decision periods (i.e., Real Periods 1, 2, and 3). Learning of this nature, therefore, does not appear to be very stable.

When the expected differences were obtained late in the game (i.e., Real Periods 4, 6, 7, and 8) for the co-operative advertising allowance variable (see H5), the presence of the end-of-game status and a break in the pattern in Real Period 5 leads to uncertainty about the nature of the stability of this type of learning.

Since very few significant differences were identified during the final nine decision periods, it is difficult to interpret the meaning of the absence of any significant differences during Trial Period 1, a period when no such differences were expected.

In total, the overall results offer only very limited support for the general hypothesis that, if marketing strategy formulation in a simulation game is an internally valid experience, then the nature of the decisions should gravitate toward the more important and more relevant strategy elements. The results also suggest that the stability of appropriate decision-making is quite limited, or at best, uncertain.

The implications of these results relate to the issues of time utilization and the achievement of pedagogical objectives. Simulation game use is a time-consuming activity for all involved. And even though this mode of learning appears to have face validity in terms of providing the means by which to develop effective decision-making skills, the results of the present study do not provide more than minimal supportive evidence. Further research is therefore required to determine how this approach to learning can be utilized to achieve the desired objectives.

TABLE 1

COMPARISON OF MEAN DECISION VARIABLE VALUES

		Period									
		Trial 1		Trial 2		Real 1		Real 2		Real 3	
Variable	Environment	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Price ($)	Push	1262.45	(292.85)	1231.85	(244.10)	1318.10	(182.96)	1357.75	(178.64)	1334.80	(181.57)
	Pull	1425.59	(425.69)	1178.00	(117.86)	1179.14	(123.88)	1176.38	(230.34)	1245.90	(179.01)
	t-value	- 1.47	NS	0.91[a]	p < .05	3.18	p < .01	2.96	p < .01	1.70	p < .05
Broadcast advertising ($'000)	Push	13.80	(8.88)	15.70	(6.42)	17.30	(9.32)	16.65	(9.24)	17.65	(9.14)
	Pull	12.00	(3.74)	15.37	(6.85)	14.83	(6.93)	17.14	(8.10)	20.69	(11.63)
	t-value	0.85	NS	0.17	NS	1.07	NS	- 0.20	NS	- 0.98	NS
Print advertising ($'000)	Push	6.30	(3.40)	9.15	(3.98)	9.60	(5.02)	12.30	(10.26)	14.05	(13.14)
	Pull	5.00	(2.37)	9.00	(3.84)	11.03	(7.16)	12.69	(7.09)	14.93	(14.83)
	t-value	1.54	NS	0.13	NS	- 0.77	NS	- 0.16	NS	- 0.24	NS
Trade advertising ($'000)	Push	6.30	(3.40)	6.45	(4.37)	6.90	(4.48)	8.20	(8.24)	7.05	(5.07)
	Pull	5.00	(2.37)	5.19	(2.77)	7.55	(7.43)	10.10	(11.17)	9.90	(12.10)
	t-value	1.54	NS	1.14[a]	NS	- 0.38[a]	NS	- 0.65	NS	- 1.12	NS
Co-operative advertising allowance (%)	Push	2.35	(2.03)	2.80	(2.04)	3.10	(2.00)	3.55	(2.19)	4.20	(2.26)
	Pull	2.15	(1.67)	2.15	(1.46)	2.28	(1.19)	2.72	(1.85)	3.21	(2.06)
	t-value	0.37	NS	1.28	NS	1.65[a]	NS	1.43	NS	1.59	NS
Sales force size (#)	Push	13.60	(11.30)	10.05	(3.27)	11.90	(3.63)	11.90	(2.36)	12.90	(3.64)
	Pull	11.63	(4.05)	11.11	(2.31)	11.62	(2.35)	11.72	(2.46)	12.86	(3.04)
	t-value	0.75[a]	NS	- 1.31	NS	0.30	NS	0.25	NS	0.04	NS
P.O.P/trade shows (% of use)	Push	50.00	(51.04)	35.00	(48.94)	50.00	(51.30)	65.00	(48.94)	50.00	(51.30)
	Pull	59.26	(50.07)	44.94	(50.64)	44.83	(50.61)	34.48	(48.37)	48.28	(50.86)
	t-value	- 0.29	NS	- 0.64	NS	0.35	NS	2.16	p < .05	0.12	NS
Premiums sales promotion (% of use)	Push	15.00	(36.64)	25.00	(44.43)	10.00	(30.78)	5.00	(22.36)	40.00	(50.26)
	Pull	7.41	(26.69)	18.52	(39.59)	20.78	(20.69)	24.14	(43.54)	24.14	(43.55)
	t-value	0.82	NS	0.53	NS	- 0.98	NS	- 2.01	p < .05	1.18	NS
Price research (% of use)	Push	70.00	(47.02)	65.00	(48.94)	60.00	(50.26)	65.00	(48.94)	45.00	(51.04)
	Pull	77.78	(42.37)	74.07	(44.66)	79.31	(41.23)	68.97	(47.08)	58.62	(50.12)
	t-value	- 0.59	NS	- 0.66	NS	- 1.47	NS	- 0.29	NS	- 0.93	NS
Co-operative advertising research (% of use)	Push	20.00	(41.04)	20.00	(41.04)	10.00	(30.78)	10.00	(30.78)	15.00	(36.64)
	Pull	7.41	(26.69)	14.81	(36.20)	3.45	(18.57)	6.90	(25.79)	6.90	(25.79)
	t-value	1.20[a]	NS	0.46	NS	0.85[a]	NS	0.38	NS	0.91	NS
Sales force size research (% of use)	Push	20.00	(41.04)	35.00	(48.94)	10.00	(30.78)	25.00	(44.43)	20.00	(41.04)
	Pull	3.70	(19.25)	25.00	(44.66)	13.79	(35.39)	13.67	(35.09)	3.45	(18.57)
	t-value	1.65[a]	NS	0.66	NS	- 0.39	NS	0.99	NS	1.69[a]	NS

TABLE 1 -- CONTINUED.

		Real 4		Real 5		Real 6		Real 7		Real 8	
Variable	Environment	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
Price ($)	Push	1304.65	(345.25)	1373.32	(207.07)	1321.28	(367.59)	1406.67	(200.83)	1372.89	(230.05)
	Pull	1273.52	(208.62)	1332.03	(261.36)	1359.76	(286.00)	1390.97	(336.56)	1408.90	(439.45)
	t-value	0.36[a]	NS	0.58	NS	- 0.40	NS	0.18[a]	NS	- 0.37[a]	NS
Broadcast advertising ($'000)	Push	21.30	(10.46)	21.63	(11.86)	22.72	(12.21)	26.62	(19.62)	24.06	(15.84)
	Pull	23.10	(11.66)	27.07	(17.11)	31.14	(25.52)	37.17	(38.92)	42.45	(51.44)
	t-value	- 0.55	NS	- 1.21	NS	- 1.52	NS	- 1.30	NS	- 1.79	$p < .05$
Print advertising ($'000)	Push	16.05	(13.44)	15.53	(10.42)	18.50	(13.02)	18.61	(13.00)	16.62	(14.65)
	Pull	15.24	(9.31)	18.62	(11.77)	21.14	(17.94)	24.48	(25.21)	28.55	(38.51)
	t-value	0.25	NS	- 0.93	NS	- 0.54	NS	- 1.05[a]	NS	- 1.55[a]	NS
Trade advertising ($'000)	Push	8.60	(7.93)	10.47	(8.93)	10.17	(8.52)	10.39	(9.26)	9.67	(10.70)
	Pull	9.14	(8.47)	11.83	(10.52)	13.79	(14.19)	17.07	(21.51)	21.17	(33.46)
	t-value	- 0.22	NS	- 0.46	NS	- 1.09	NS	- 1.47	NS[a]	- 1.72[a]	NS[b]
Co-operative advertising allowance (%)	Push	4.55	(2.09)	4.58	(2.78)	5.39	(2.50)	5.72	(2.22)	5.39	(2.45)
	Pull	2.97	(2.13)	3.45	(2.16)	3.28	(2.07)	3.55	(2.34)	3.59	(2.28)
	t-value	2.58	$p < .01$	1.58	NS	3.14	$p < .01$	3.15	$p < .01$	2.56	$p < .01$
Sales force size (#)	Push	12.80	(4.93)	13.53	(5.45)	14.94	(6.35)	36.22	(91.08)	13.52	(8.00)
	Pull	13.83	(5.78)	12.93	(3.86)	12.34	(3.48)	13.14	(4.04)	13.21	(4.07)
	t-value	- 0.65	$p < .65$	0.44	NS	1.82[a]	NS	1.07[a]	NS	0.14[a]	NS
P.O.P/trade shows (% of use)	Push	50.00	(51.30)	47.37	(48.94)	50.00	(51.45)	55.56	(51.13)	55.56	(51.13)
	Pull	48.28	(50.86)	48.28	(50.86)	44.83	(50.61)	37.93	(49.38)	51.72	(50.86)
	t-value	0.12	NS	- 0.06	NS	0.34	NS	1.17	NS	0.25	NS
Premiums sales promotion (% of use)	Push	10.00	(30.78)	10.53	(31.53)	22.22	(42.78)	22.22	(42.78)	16.67	(38.35)
	Pull	27.59	(27.59)	27.59	(45.59)	37.93	(49.38)	44.78	(44.83)	31.03	(47.08)
	t-value	- 1.51	NS	- 1.42	NS	- 1.11	NS	- 1.58	NS	- 1.09	NS
Price research (% of use)	Push	40.00	(50.26)	52.63	(51.30)	33.33	(48.51)	38.89	(50.16)	0.00	(0.00)
	Pull	51.72	(50.86)	51.72	(50.86)	37.93	(49.38)	31.03	(47.08)	3.45	(18.57)
	t-value	- 0.80	NS	0.06	NS	- 0.31	NS	0.54	NS	----[c]	--
Co-operative advertising research (% of use)	Push	15.00	(36.64)	5.26	(22.94)	5.56	(23.57)	5.56	(23.57)	5.56	(23.57)
	Pull	6.90	(25.79)	3.45	(18.57)	3.45	(18.57)	0.00	(0.00)	0.00	(0.00)
	t-value	0.91	NS	0.30	NS	0.34	NS	----[c]	--	----[c]	--
Sales force size research (% of use)	Push	20.00	(41.04)	5.26	(22.94)	11.11	(32.34)	5.56	(23.57)	0.00	(0.00)
	Pull	10.34	(30.99)	3.45	(18.57)	6.90	(25.79)	0.00	(0.00)	0.00	(0.00)
	t-value	0.94	NS	0.30	NS	0.49	NS	----[c]	--	----[c]	--

Notes: All t-tests calculated using a Push - Pull format. Push n = 20 and Pull n = 27 for Trial 1 and 2. Push n = 20 and Pull n = 29 for Real 1 to 4. Push n = 19 and Pull n = 29 for Real 5. Push n = 18 and Pull n = 29 for Real 5 to 8. Unless otherwise indicated, all t-tests based on pooled-variance estimate. Two-tailed, independent t-test carried out for Trial Period 1. One-tailed, independent t-test carried out for all remaining periods.

[a] t-test based on separate-variance estimate. [b] Significant at $p < .05$ if hypothesis had been stated in reverse order. [c] No analysis due to a lack of variance.

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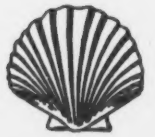
INTEGRATING THE ARTS AND SCIENCES



ARTS AND SCIENCES AND THE VISUAL ARTS: A NEW KIND OF INTERDISCIPLINARITY

Jo Buffalo

Cazenovia College has proposed a program of study that may very well be unique in the country. This program attempts to give the student both art training and abilities in areas we have identified as liberal arts competencies: social interaction, communication skills, problem solving, and valuing. The coursework will be interdisciplinary in three ways. First, the arts and science courses are competency based rather than discipline based. Second, the professional studio classes are a recombining of Illustration and Advertising/Graphic Design into Visual Communication. Third, the students will participate in seminars during their junior and senior years that will include students from all areas of the upper division. There will be unique problems in evaluating students because of the nature of the program. Along with exams, papers and presentations, we rely heavily on the use of portfolios, which are very flexible, comprehensive evaluation tools.

> I have a number of observations to make . . . They are made particularly in the hope that something really fruitful may emerge . . . They are made particularly in the hope that the student who happens to be a young person of talent and ability in art may no longer be caught between two impossible choices; the one whether to gain a liberal education at the cost of losing his creative habit, the other to sacrifice his liberal education in order to gain adequate training in art.
>
> Ben Shahn

Introduction

In the past year, faculty at Cazenovia College have proposed a program of study that may very well be unique in the country. It addresses the vexing problem

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Jo Buffalo, Director - Commercial Illustration, Coordinator - Arts Specialization in the B.S. in Applied Arts and Sciences, Cazenovia College, Cazenovia, NY

stated above by Ben Shahn in 1957. We have developed a Bachelor of Fine Arts in Visual Communications with specializations in Illustration and Graphic/Advertising Design. Despite the traditional sound of the name of the program, it is, in fact, an innovative way to solve the problem of a well-rounded education for the student with ability and a desire for training in art. This problem is one of the four major kinds of activities which create a matrix of interactions that are the characteristics of what Klein describes as "genuine integration" or interdisciplinarity. This particular problem is addressed in number two of the major activities listed below, although numbers three and one figure in the attempt to solve the problem. The first four numbered activities are descriptive of what is considered "level one" (Julie Thompson Klein, 1989).

> 1. borrowing across disciplines
> 2. attempts to solve particular social, technological, or intellectual problems
> 3. increased consistency of subjects and methods among specific fields
> 4. the emergence of an actual interdiscipline
>
> The second level embodies an overarching synthesis that transcends narrow disciplinary epistemologies, usually through a powerful integrative concept or grand objective. In general practice, the first of these higher levels is labeled "crossdisciplinary" or "interdisciplinary", the second level "transdisciplinary".

The interdisciplinarity in our new program operates on three levels. First, all of the courses designated as Arts and Sciences courses are competency based rather than discipline based. We have identified the competencies as: social interaction skills, the ability to communicate effectively in a wide variety of modes and settings, problem solving capabilities, and an understanding of their own values plus some appreciation for the other values underlying decisions made by other people. The faculty developing the curriculum for the B.F.A. felt that those abilities were crucial to surviving and being successful in the commercial art/design business. Twenty-seven credits during the junior and senior years are courses such as: Communications in the Modern World: Forms and Techniques, Commitment and Choice, Psychology Applied to Interpersonal Behavior, and Ethical Issues in Organizations. The choice of this many "non-studio" courses is an indication of our commitment to teaching those competencies that are associated with the liberal arts. The Arts and Sciences courses were chosen from the curriculum of the B.S. in Applied Arts and Sciences which has been in operation since 1989. The faculty have been very pleased with the success of the students in the B.S. program.

The second level of interdisciplinarity is in the professional studio courses. There has been, over the years, a separation of studio courses into very specialized majors in most art curricula across the country. This has occurred, I believe, primarily due to the division of colleges into departments and the competition for resources leading to a less than ideal climate for cooperation. The strategy that allowed the work to be successfully divided has led to compartmentalized curricula. One of the divisions that has been least beneficial has been the separation of illustration from graphic/advertising design. It has prevented students from obtaining a broad enough experience in the field. The resulting problems for students graduating are: the illustration students have little or no knowledge of typography and production techniques and the graphic/advertising design students have very poor drawing skills and limited experience creating imagery. Of course, employers ideally want employees with both sets of skills since in the business there are no truly compartmentalized jobs. The typical project in the field combines elements from both areas. Even if the team of people working on the project is sufficient in numbers to allow each member to do specialized work, having knowledge about the other elements involved will enable the employee to function more successfully in the team. Having both sets of skills make them more desirable as employees, especially to a business with fewer people. Our students typically seek work in smaller communities where it is advantageous to have diverse skills.

The third level of interdisciplinarity in the program is represented by seminars in which all juniors and seniors participate. In association with their junior year field experience there is a Bridge Seminar. The primary content of this seminar is the linking of the academic work with their outside work experience. It is possible to integrate the B.F.A. students with the B.S. students into mixed sections. The students in the seminar could then consider the problems encountered by other students in all disciplines and their associated work situations. In Senior Project our students are involved in critiquing other students research methods and presentations. The experience is doubly valuable because it allows the students to see the nature of research in another discipline and it also requires them to analyze material and critically think about projects that are "not theirs" and may not be in their area of interest.

The preliminary results of a survey of businesses of the type that may hire our students graduating with a B.F.A. support our commitments to the competencies and core studio skills such as drawing, painting and design. There was less interest in having the students be highly trained in technological areas. Considering the rate of technological change over the last twenty years, higher education is hard-pressed to keep up on the reading, let alone the hardware and software. It also makes sense that students cannot possibly be trained to operate all the kinds of equipment that are currently available.

This upper division (junior and senior years) allows graduates of highly technical A.A.S. programs to continue with their education in a way that will allow them to function successfully in the competitive complex business environment. What does this mean for the student? We are hoping to accomplish two things. First, we are working with the students primary area of interest by giving students the opportunity to develop core skills such as drawing, painting and design as well as broaden their understanding of their chosen field through a series of advanced studio courses. Second, we hope to fill in the gaps in their general education and give them proficiency in the arts and science competencies. The development of the program has been an exciting challenge to try to get all the pieces of the puzzle to work. Our hope is that it will offer our students a stimulating, rewarding educational experience that will prepare them to be successful employees and inspire them to be life long learners.

> . . . I am sending these drawings to you. Your Lordship may choose any of them, if you think they are worthy of your choice . . .
> Raphael Sanzio to Count Castiglione, Rome, circa 1514

Evaluation

The bane of every teachers' job is the process of evaluation. The smug and the self-righteous make claims to the perfect system and maybe there is one when the material contains only "right" and "wrong" answers. Those of us who are working within curricula where "right" and "wrong" are not in the vocabulary struggle mightily between "having standards" and allowing for nonconformity.

To give the struggle some context we should consider the case of Veronese in the year 1573. He was summoned before the inquisition to face charges of blasphemy. The charge was made because of the nature of one of his paintings of the Last Supper. The structure of the composition created an outer scene of worldliness in contrast to an inner scene of spirituality. Included in the figures in the outer scene was a dog. The figure of the dog was the element of the painting that was considered blasphemous. This charge was based upon a set of standards that was established ten years previously at the Council of Trent. At that august meeting, the proper iconography was determined for this and other religious scenes. The dog was not on the list of acceptable images. Veronese defended himself on the grounds that formal considerations had led him to that composition. They didn't buy that explanation. He was ordered to substitute a Magdelene for the dog or be prosecuted by the Holy Tribunal. Veronese stood his ground by retaining the figure of the dog; however, he did change the title of the painting.

> Art is one of the few media of expression which still remains unedited, unprocessed, and undictated. If its hazards are great, so are its potentialities magnificent. It seems to me that this particular function of art - to express man in his variety - is one that will not easily run out.
>
> Ben Shahn

I am sure that there are students who feel that the process of evaluation is like the Inquisition. I am also sure that often their understanding of the criteria for the evaluation leads them to believe that those standards were arbitrarily decided upon by a bunch of bearded old fogies. That brings us to the heart of the matter. How can we fairly evaluate the product/process of student effort when the work done cannot appropriately be quantified?

In the latest attempt to have a more comprehensive and fair evaluation system, liberal arts education has chanced upon the concept of "a portfolio." Despite the enthusiasm of the converts, this is not a new concept. It is a valuable, time-honored tool that has been borrowed across disciplines. I submitted my first portfolio of work for evaluation in 1965. That body of work was part of the credentials which enabled me to be admitted to college. Working with a portfolio or collection of work has been the artist's main tool for evaluation, part of an active working process, archival storage, and selling/obtaining work. The concept was operating long before the word portfolio was in use to describe it.

Portfolios

There are general truths about working with portfolios. They are the collected pieces of the efforts of the student which, when put together, will reveal a picture of skills, intellectual achievement, motivation, craftsmanship, focused or unfocused work. It will be clear how conventional or nonconforming the work is and whether the student is interested in details or is a more global thinker. By relating specific experience collected in the past 27 years of working with portfolios, it is hoped that the experiences and observations can be adopted or modified to fit other disciplines. I believe that there are some overreaching ideas that cross the boundaries of disciplines which make the differences in evaluating visual work compared to other kinds of work smaller than has been previously thought.

The problems in evaluating student art work have always been excruciating. We are haunted by the potential for harsh unproductive criticism or flaccid commentaries which offer little direction. Many of us in the Arts are required to assign letter grades as part of the evaluation of student work. It is a most difficult task. The use of a portfolio allows us to do more of an "averaging" of the student's effort. Students just beginning their artistic careers have skills that are not yet solid enough to be able to perform consistently on every single project. Imagine being required to render animals, people, landscapes, outer space, creatures that don't exist, portraits, all kinds of equipment and combining those images to create new meanings. There will usually be at least one project during the term that will not be up to the usual standard. On the bright side, usually there is one project that will rise above all the rest in quality. The polarity in performance can be rather extreme in art students because of the difficulty of balancing all the skills involved to produce an outstanding piece. When the conceptual work and the physical rendering come together it is a joy for both student and instructor. It is much easier for the student to understand their progress and to accept an evaluation when they are given the cushion of the group of work. Their great fear, of course, is to be evaluated for the term on the one piece that they messed up.

Portfolios have been a traditional evaluation tool for admission into college as well as a way to grant merit scholarship money. A great deal of information is apparent when looking at a portfolio submitted by a potential student. It is immediately clear how much the student has been challenged by the projects. It is usually clear which of the pieces are personal pieces which indicate some of the nature of that student's thinking process. Often the work reveals personal fantasies. It is quite clear looking at ten to fifteen pieces of work what artistic skills the student has or does not have. By looking at the range of pieces submitted, an educated guess can be made about the intellectual curiosity of the student even if the work is all projects created in school. Assigned projects are fairly easy to identify. They most frequently are assignments designed to give students a combination of: work in a particular medium and practice with a basic principle of visual art. Enormously revealing is the complete lack of projects which indicate that the student is receiving no training. How the portfolio is presented also tells me about the quality of help the student is receiving. I have yet to encounter a student who did not desire some coaching when in the anxious process of sending their work off to be evaluated. A recent decline in the overall quality of the portfolios being submitted makes clear the effects of the cutbacks in education.

Evaluation is never a comfortable process. Faculty who are evaluated are well aware of the feelings it can provoke. Students know the amount of information that is contained in a portfolio. Because of the amount of work and the amount of themselves invested in that body of work, students, in my experience, tend to be very sensitive during a critique of their portfolio. The ability to separate themselves from their work seems to be nearly impossible. Criticisms are taken quite personally. In order for a review to be effective, great diplomacy must be exercised. When the students response to the review is "she doesn't like me," little has been accomplished. Ideally, the student should emerge from the review with a clear understanding of their pattern of strengths and weaknesses. Suggestions for modifying some part of their working process to achieve better results is usually accepted as constructive.

Having a clear understanding of the criteria of the evaluation is extremely important for the student to feel they are receiving fair treatment. If it is put in writing that the portfolio will be judged on formal concerns (skills and technique) and conceptual work, then a criticism that the idea contained in a piece is not clearly expressed by the methods used is valid. Once the basis of the evaluation is clear, students often feel free to discuss other aspects of the portfolio knowing that they are not being graded. Frequently, these discussions are quite fruitful to my understanding of the student's efforts and the student's understanding of the process of artistic development.

Most of the portfolios that are evaluated as part of course work have individual pieces which may also have a grade. It is often quite productive to consider the students pattern of response to assignments and the resulting product and subsequent grade. If there is a pattern of not completing work on time and being marked down for missing deadlines, a discussion may determine whether the problem is one of procrastination or a problem of process where too much time is spent in a particular stage of the project's development.

Besides educational evaluation, portfolios can serve other purposes:

- an archive of work produced - kept for use as a source of ideas, evidence of progress, collection of achievement
- a current group of work in progress used for process (not show)
- a focused group of work used as a tool to obtain work
- a fluid, ever-changing group that is a part of a person's credentials

At any one time, an artist has multiple portfolios in a state of flux. They are assembled, disassembled and recombined to suit the needs of a very demanding and unforgiving profession.

It is our intention that students entering the B.F.A. program will submit a portfolio for admittance. They will receive their first evaluation based upon that portfolio. It will also be an opportunity at the time of the review to discuss the student's expectations about the program and their educational goals. The B.S. program has a system of mentoring that will also be established for the B.F.A. It has been the experience of the mentors in the B.S. program that students are extremely interested in having periodic portfolio reviews. Students have sought these reviews outside of the formal evaluation processes. The mentors have acted as role models, coaches and art critics. They have also facilitated the student's entrance into the field experience through their network of contacts in the business world. This kind of contact with an older artist has been spoken of by the students as "the reality bounce" or asking for "perspective." We have also planned for an exit interview which will also involve a portfolio review. We believe that this will be of great value as a capstone experience. Our expectations are that the initial portfolio will contain only artwork related to their specialization. Our hope is that their final portfolio will contain far better artwork and various combinations of written material, videos, computer disks, audio cassettes, photographs and mixed media projects from which they can choose to make any number of portfolios to use for obtaining work, an archival source of ideas, or for entrance into graduate school.

Conclusion

Cazenovia College has proposed a program of study that may very well be unique in the country. It addresses the problem faced by the student of artistic ability of whether to receive training in art or to gain a liberal education. This program attempts to give the student both art training and abilities in areas we have identified as liberal arts competencies: social interaction, communication skills, problem solving, and valuing.

The coursework will be interdisciplinary in three ways. First, the arts and science courses are competency based rather than discipline based. Second, the professional studio classes are a recombining of Illustration and Advertising/Graphic Design into Visual Communication. Third, the students will participate in seminars during their junior and senior years that will include students from all areas of the upper division. They will be involved in organizing and implementing a conference at the end of their senior year.

There will be unique problems in evaluating students because of the nature of the program. We hope to address these with a variety of methods. We plan to continue to use the traditional tools from across disciplines. Besides exams, papers and presentations, we will also rely heavily on the use of portfolios which are a very flexible, comprehensive evaluation tool.

It is our great hope to be educating artists of talent but also people of substance.

> The incidental items of reality remain without value or common recognition until they are symbolized, recreated and imbued with value. The potato field and the auto repair shop remain without quality or awareness or the sense of community until they are turned into literature by a Faulkner or a Steinbeck or a Thomas Wolf or into art by a Van Gogh.
>
> Ben Shahn

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THE HISTORY OF THE HUMAN SPECIES IN THIRTY-SEVEN MINUTES

(Eight Minutes for Questions)

Norman N. McWhinney

This somewhat swift over-view of the inter-action between art and science demonstrates an inextricable bond. From the development of speech, and consciousness, which created the species, we have the period from the cave paintings to The Iliad. The invention of the phonetic alphabet makes possible The Golden Age of Greece, and "The Grandeur That Was Rome." The power of private knowledge through literacy maintained the church. Invention of printing shatters that hegemony, and begins the Renaissance. Individuality, Isaac Newton, and the mechanical sciences shape art, until 1900. Einstein and quantum mechanics give us Picasso, expressionism, etc. Electronics after 1950 reshape our view of art and the universe.

This is a presumptuous presentation which will give the panorama of human pre-history and history in a bit more than half an hour. The emphasis will be upon the inter-action of the arts and sciences, and the inextricable bond between them, a unity which shall flourish in the 21st century. My emphasis is overview, and thus I must omit much which others might consider important. I wish to provide a perspective on humanity from the beginnings to the near future. As partial inspiration and model, Carl Sagan's "Cosmic Calendar" is useful. Sagan's calendar, as you know, compresses the history of the Universe from the Big Bang into one calendar year. Humans appear in the last minutes of the last day of the year, fire 14 minutes ago, cities 25 seconds ago. Given that perspective, my 37 minutes may seem absolutely leisurely and genteel. Another important influence is Jacob Bronowski's *Ascent of Man*. (Oh how I wish that he had called it the *Ascent of Humans*.) Since Bronowski has 13 hours to develop his thesis, I feel somewhat like the *Reader's Digest* of Humanists. I am going to take a deep breath and begin the History of the Human Species in 37 minutes. I have never done this before, I hope that you will respect me in the morning.

Norman N. McWhinney, Professor of English University of Pittsburgh at Greensburg, Greensburg, PA

Two million years ago there were no humans; a million years ago there are humans. This is Bronowski's statement, and I thank heaven for round figures. If he had said, 1,973,000 years ago there were no humans, 982,000 years ago there were, we would not be in this room today. I follow Bronowski's approach; McWhinney's 3rd Law is "When in doubt, round it out." I saw a cartoon of two early Humanoids, one is saying to the other, "Since we now have language, 'How's Business?' According to Bronowski, about a million years ago (Whew, we are a young species. Dinosaurs had about 90 million years, the Cetacea started 65 million years ago). Language did it. We don't know how, only approximately when, but language jerked our ancestors into time, language is timebinding. Breaking silence into time is, perhaps, the Fall which began in the Pleistocene age, about a million years ago. If you think services are slow today, we had to wait 500,000 years before we got fire; then things heated up, but not in a hurry. We had to wait another 450,000 years before we began to bury our dead. (In that regard, have you ever thought how many snakes were picked up before humans learned not to pick up snakes. (That is John Locke with a vengeance, and more than a bit of Freud.) The tempo of our species is picking up geometrically, and it is only 30,000 more years before we have the first conscious art of Cave Painting in Alta Mira and Lascaux. This is the first conscious, loud, statement "I Was Here" which echoes in WWII "Kilroy Was Here." These are the same parameters which we call the Human Condition. Interestingly, with cave paintings we also get sewing, and spear throwing. There are no cave paintings of sewing; what may be deduced from that? All of the above may be considered the old stone age. After that, life starts coming to the dogs-domesticated about 10,000 B.C.; human's best friend just doesn't sound right, and the beat goes on. Suddenly we have farming, villages, pottery, weaving and all the art that implies. SUMERIA, UR C.5,000 B.C. Where did this all come from? Damn, we are a smart species! With this pre-history ends. So far we have covered 993,000 years. Just think what they could have done with Compound Interest.

From now on, acceleration is going to increase so fast that I had requested seat belts for your chairs.

In the Bronze Age (Copper was discovered because somebody smelt it) writing fixed time, sharpened spears, and shaped human consciousness. *The Iliad* can give us, today, insight into drives, desires and values of the Bronze Age. Achilles may be the first real man (name another before him who was not a God or a Politician)? Andromache, likewise may be the first real woman. I use the word, real, to imply self-consciousness: one conscious of self as an individual who must make internal choices of action. The internal debate of Agenor in Book 21, the struggle of consciousness in Hector before he flees Achilles in Book 22 indicate with Julian Jaynes a freeing of humans from direction by Gods, or instinct. The overwhelming poetry of *The Iliad* preserves this transition, and gives it power. The power of Homer in *The Iliad* and *The Odyssey* is not just supreme poetry, but also the depiction of two stages of human consciousness. *The Iliad* is the last of the Old and *The Odyssey* is the first of the New: Odysseus is the archetype of modern consciousness. The wily, many-turned, Odysseus has infinitely more flexibility in his choices because he is conscious of his choices. They are not the God's choice, or a reaction to the God's choice. James Joyce made this clear with the choice of his title for a day in Dublin. All humans resonate to the epic of Odysseus and Penelope. I have not, thank Zeus, met an Achilles, not even in Hulk Hogan or Rambo. Fortunately, a number of my fiends have touches of Penelope and/or Odysseus. After about 1,000 years of their story being sung by rhapsodes, the story was fixed in writing by Athenian tyrant Psistratus in c. 550 B.C. He also was a patron of Thespis, father of drama, and had the first library. Such is the power of the phonetic alphabet-as simple as ABC. It permits the recording of folk epics, the creation of dramatic scripts and earth-shaking concept of books.

The phonetic alphabet finished tribal society, and created the Golden Age of Greece: Sophocles, Aeschylus, Euripides, Aristophanes, Socrates, Plato, Aristotle, Need I continue? NO. The alphabet creates Western Civilization. I have read that Western Civilization is a footnote to the 5th Century Athens, interestingly scholarly, hence, literate metaphor. The Glory that was Greece is based upon the first interchangeable part, the phonetic alphabet. (This is not to demean in any way great civilizations based upon some other form of communication such as the ideograph, or the spoken word.) The philosophic and sensuous bias of the phonetic alphabet creates the concept of the individual of worth, and dignity separated from the collective identity of the tribe. The edginess created by the individual's separation from the groups is examined in Freud's *Civilization and its Discontents*, and Norman O. Brown's *Life Against Death*. Since the separation occurred so recently in the history of the species, it is no wonder that the reverberations seem modern. Less than 5,000 years separate us from Achilles, and Odysseus takes it in stride.

This same alphabet with its linear, sequential, goal-oriented perspective gives us the Grandeur that was Rome. It takes a lot of papyrus and roads to hold an empire together. Literacy is also another factor which can separate us from them. We are literate; you are Barbarians. We are Romans; you are slaves. We have Gods, you have one for Christ's Sake. Constantine accepted Christianity as a State religion in 330 A.D. Before that is the time of the martyrs. The score is Lions 7 - Christians 0. Don't call us -coliseum!

However, *Sic Transit Gloria Mundi*. Western Rome fell to those illiterate barbarians in 476 A.D. (Thank heavens Eastern Rome, Byzantium, lasted another

1,000 years.) But the literate faithful Christians preserved the "Word of God" and Benedict's first Monastery opened in 526 A.D. A nice round fifty years after the Fall McWhinney 3rd Law is at work. What is a Monastery, but a seed of faith, and culture waiting for a chance to grow in safer times.

The Universal Apostolic Catholic Church was the keeper of private knowledge because literacy gives the private power. The illiterate cannot argue against the book. Clergy, cleric and clerk are cognate. To argue against The Book is dangerous although the beauty of Chartres, Seville, Notre Dame, Mont St. Michel, Canterbury, and Winchester Cathedral retain a collective glory of the one church. The beauty and suffering and glory continue through Popes and Schisms and Saintliness for 1120 years after Constantine until the invention of the printing press. Then all fragmentation breaks loose; it is the nature of the alphabetic medium increased a thousand fold by the printing press. The Middle Ages end; the Renaissance begins. Need we mention Leonardo, Michaelangelo, Erasmus and Sir Thomas More. Before the printing press in 1450, there are the 1120 years of cohesion in the church. Sixty-seven years after printing, Martin Luther starts the Reformation by tacking his 95 Theses to the Cathedral door. In 1517, Luther's assumption was that the church goers could read. He was right for the first time in almost a million years. The rest is easy and swift; literacy gives private power that fragments. Within 17 years of Martin Luther, a third church appears; Henry VIII establishes the Church of England. Now three separate Christian groups can form alliances in war, and to some degree, inadvertently decimate many of the indigenous people of North and South America. It is hard to imagine the Great Inca saying, "I did not know that I was pre-columbian; I hope that the Protestant English sink the Catholic Spanish Armada in 1588." Shakespeare was 24 years old then and *Hamlet* was produced in 1603, the year that Elizabeth I died. That made possible the reign of James whose Bible created all kinds of individualism: The Methodists, Presbyterians, Quakers, Shakers, Diggers, Levelers and Mennonites among others. The King James *Bible*, one of the few great works of art created by a committee and fostered by a machine, the printing press, is the most influential book in the English speaking world. All people had access to God's Word and Revelation. Within the century, however, Isaac Newton's *Principia* in 1687 created a new, and for the first time, orderly universe. Human reason triumphs over the apparent chaos of events (interestingly the Salem Witch Trials happened five years later; we celebrate the tri-centennial of that event this year). The Age of Reason begins because the vast majority of intelligent people are literate, and knowledge accumulates geometrically. Newton's universe is only 305 years old. Newton's universe, Locke's *Tabula Rase* and Industrial Revolution quickly led to the American and French Revolution. In an orderly universe, it may be proclaimed "We hold these truths to be self-evident that all Men are created equal, that they are endowed by their Creator with certain unalienable Rights that among these are Life, Liberty and pursuit of Happiness". These words were written only 216 years ago. They are the beginning of the "Last best hope of Mankind." All of the poetry, fiction, painting and science of America have appeared in the last 216 years. In fact, truly American poetry began only 137 years ago with the publication of Walt Whitman's *Leaves of Grass*. What an amazing burst of creativity.

If we are now at the end of history, history meaning a contest between tyranny and democracy, the words of the Declaration of Independence have triumphed. The universe, however, is not concerned with words but with deeds like $E=MC^2$, and hmmmm of Freudian non-directive analysis. The art of this century reflects the insights of quantum mechanics and psychology: Picasso, John Cage, Andy Wharhol and Elvis Presley, Georgia O'Keefe, Sylvia Plath, Langston Hughes, William Faulkner, C. ad infinitum.

A young species, we live and communicate in an Einsteinian universe conveyed by electronic media. It is a relative universe which we observe from the global village of instantaneous communication. Thomas Jefferson, when President, said, "We have not heard from Benjamin Franklin this year; we should write him a letter." Today, we learn immediately of every earthquake and ferry boat sinking whether we want to know about them or not. Henry David Thoreau said, "We are in great haste to make telegraphic connection between Maine and Texas. It may be that Maine has nothing to say to Texas." Walt Whitman died the year before my father was born and that is ten years before the Wright Brothers flew at Kitty Hawk. My father introduced me to the telegrapher, a man named Drinkwater, in Manteo, N.C. who had sent the message of December 17, 1903 that humans had flown for the first time. Drinkwater said, "that was not the important news of the day." The important news was that an U.S. submarine was aground on Hatteras Bank. So much for human perspective; film at 11:00. My father lived to see human's first footsteps on the moon. As Carl Sagan says, "we are all star stuff returning to the stars."

We live in the midst of a Renaissance so vast that it is difficult to see; we don't know who discovered water but we know it wasn't the fish. Our Renaissance makes the one created by the printing press pale by comparison. Electronic media has, and continues to change everything: science, art and the reality which they examine, radiate or reflect. We are beginning to learn that we are not the solitary intelligent species on the planet. We listen to the songs of the humpback whale and realize that they may rhyme. Since Sputnik circled the planet in 1957, the Earth itself has become an art form - pop art, mom art - performance art, the draping of the Grand Canyon, and a concert hall full of metronomes - art is anything that you can get away with.

Just over time's horizon, just beyond Nintendo, Super Nintendo, High Definition TV and Holography, is "virtual reality." This is the ability to place an individual in a simulated environment which is indistinguishable from traditional reality, or for that matter, traditional dreams or fantasy. In WWII, fighter pilots were trained in flight simulators which provided the sensation of actual flight; Aldous Huxley in *Brave New World* postulated "feelies" as a logical extension of sight and sound simulation. Electronics make possible involvement in any imaginable scenario, everyone a space traveler, everyone a time traveler, everyone in dialog with Socrates, Sappho, Buddha, Christ, Hitler or Jeffery Dahmer (may the latter soon need a footnote). For myself, I can't decide whether I wish to slay a fire breathing dragon or to become a dolphin and be the first to translate Delphinese poetry into English.

This week, on national public radio, I heard the electronic crackling of the first neuron made of silicon, a silicon model of a human nerve. (If you are reading this and you are the first person to contact Sally R. before the end of the conference, you have just won $10!) Remember, the brain is a computer that just happens to be made out of meat. Although only one silicon neuron exists at the moment, its replication will be easy. The creator of the silicon neuron talked of building a silicon fly which can be sent to other parts of the Milky Way, our galaxy, to send back information. Will the information be received by silicon or by meat? Within the blink of an eye, a computer will pass the Turing Test and become an artificial intelligence (it may have as a corollary artificial stupidity-as opposed to real stupidity). Can an artificial intelligence create real art? Would you want an artificial intelligence to live in your neighborhood or for that matter to date your sister? Perhaps we have arrived at childhood's end.

As I sit comfortably by the flames in my hearth, in my artificial cave, I think "All this in just a million years."

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HOW DRAWING CAN COALESCE SKILLS IN READING, WRITING, AND MATH

Matt Morrison

Drawing can be taught in ways that will coalesce, cohere, and clarify the student's learning in reading, writing, and math. Recent research in dual brain function indicates that schools are mainly concerned with educating only half of the human brain and usually shun the intuitive, holistic, and analogic aspects. Using fresh garden vegetables as models, in a four-step participatory demonstration, the presenter moves from graphic to verbal, verbal to graphic in seeking to wed rhetorical invention with artistic creativity.

Necessity nudges us toward a unified theory of learning. Most of our public schools are not stressing art and other creative activities that our children require in order to develop R-mode thinking skills--skills they must have to survive in a highly competitive, 21st-century workplace. Many of the schools which *do* offer art as an elective regard it as a net to catch the talented few. A high school principal gave me a quick assessment of their art program: "One of our students last year won a partial art scholarship from Texas Tech." What of the hundreds of other students in his art program? In spite of the budget-crunch demands for efficiency, myopic fragmentation and mad reductionism seem to be comfortably entrenched. In order to focus on the problem, consider two contrasting vignettes. The first is all too common.

On a recent air flight I sat across the aisle from a mother and her daughter. The girl, who appeared to be about seven, busily checked responses in a sheaf of homework dittos, toyed with a small Gameboy, fiddled with her seat belt, nodded in rhythm to her plugged-in Walkman, chattered with her mother, and munched on peanuts (How she got the bag open I'll never know). The precocious little darling was obviously occupied--*but she was not engaged*.

Matt Morrison, Professor, Abilene Christian University, Abilene, TX

In my Cody Coyote Art Club at a local elementary school, we drew and painted twigs and leaves (Figure 1). "Now, you've got to look closely at all the rich colors and tiny veins on the leaves and the little bumps and nodules on the twigs." After about twenty minutes of working on his pencil drawing, Charlie, a first grader, scroonched up his face, tilted his head and in sudden wonder said, "This is really hard!" It was the supreme compliment. For concentration--*total engagement*---is an increasingly rare commodity in the classroom.

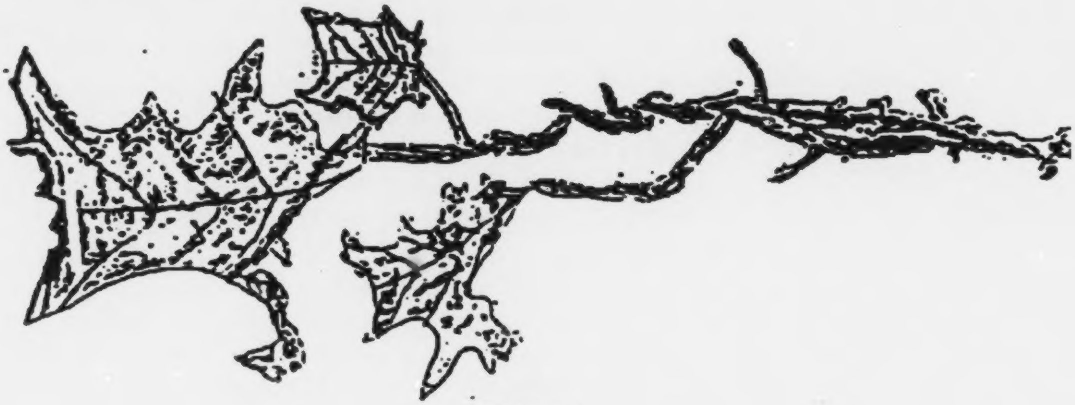

Figure 1

Pencil and Craypas Drawing
Erin Dunlap, Taylor Elementary
Abilene, Texas

Even though my point seems rather obvious, I will restate it: Art should be taught at all educational levels as a true basic--in ways that will coalesce, cohere, and clarify the student's learning in thinking, speaking, reading, writing, and math.

Teasing out my experiences--from a one-room school in West Virginia to an accelerated art program in Baltimore (as a student), from teaching art in the Louisville inner city to writing a literacy program for the Tuscarora Nation of North Carolina, from years of teacher education in language arts at two state universities to work as an editorial cartoonist and advertising artist and copywriter--I seek to wed rhetorical invention with artistic creativity and move naturally from graphic to verbal, verbal to graphic in a four-step participatory demonstration. But first, let me share my reflections on and synthesis of some relevant research.

Synthesis of Research

First, art skills are forms of intelligence. Harvard psychologist Howard Gardner offers seven intelligences that are found in most people but differ in their level of development: linguistic, logical, spatial, musical, kinesthetic, intrapersonal, and interpersonal. In Gardner's framework, intelligence is defined as a set of skills that enable a person to define and solve problems. In a recent special-theme issue, "The 10 Best Schools in the World," *Newsweek* spotlights only two pockets of excellence in the United States. One of the two is Pittsburg's PROPEL program (an acronym for production, perception, and reflection--the three stages of learning in the PROPEL process). The program is a result of Gardner's work. Reporter Farai Chideya summarizes his basic thrust: "Artistic 'skills' or 'talents' are actually separate forms of intelligence that should be nurtured in school along with more traditional subjects." According to Gardner, the approach is "art for art's sake and art for *mind's* sake."

Second, art energizes other basic skills. Betty Edwards believes that drawing is a parallel language to reading and the two share the same perceptual heuristics. I go beyond that to assert that art is an energizer of all the language arts and math, and as such should be integrated in instruction as a true basic skill. Gabriele Lusser Rico demonstrates how *clustering*, as a key strategy in writing instruction, can be used in "orchestrating hemispheric cooperation" (71-73). She locates the roles played by the two distinct "selves" many writers recognize: the *Design* mind is enabled to vision and communicate beyond itself by the unique verbal sequencing strengths of the *Sign* mind. She cites Roger Sperry in describing the result: "An actual physiological harmony occurs as the brain's diverse strengths work together. The reward of such cooperation is a psychological sense of wholeness. Herein lies our need and yearning for creative activity" (68-87). The teacher can *urge and prod and guide* the student to orchestrate hemispheric cooperation.

Third, intense vision happily embraces learning. Harry S. Broudy's discourse on building an adequate *allusionary base* as the matrix of reading comprehension and the other basic literacy skills complements the writings of Edwards and Rico on using right-brain techniques to release expressive powers. Rudolf Arnheim argues that unless we can conjure up an image of some process or concept, we will be unable to think clearly about it. Under his category of *spatial intelligence*, Howard Gardner recalls the active role of imagery in the thinking of several great scientists and inventors. Albert Einstein's "most fundamental insights," for example, "were derived from spatial models rather than from a purely mathematical line of reasoning"(190-192).

"Science itself is a fiction," Elliot Eisner asserts. "Humans make it, it's fallible, it changes, it is a product of imagination" (295). My long-time experience in teaching both language and art to students of all levels has led me to construct a triad that represents the relations of the basic skills: *Oh, if only we could think as smart as we see, talk as smart as we think, and write as smart as we talk* (27-42).

Fourth, graphic and verbal metaphor provoke learning. Aristotle says that "we all take a natural pleasure in learning easily." Since words stand for things, "those words are most pleasing that give us fresh knowledge." Since strange words "leave us in the dark; and current words we know already. Accordingly, it is metaphor that is in the highest degree instructive and pleasing" (206). James Seitz suggests that the reader, caught between *impertinence* and *a new pertinence* of striking metaphor, enjoys a semantic tension that sustains both *unity* and *meaning*. The student's yearning for creative activity and the desire to complete a real task--the natural process of *total engagement* in learning--nourishes synthesis or analysis and echoes the Design/Sign resolution (Rico) and the *inference* plus *corresponding pleasure* impulses (Aristotle).

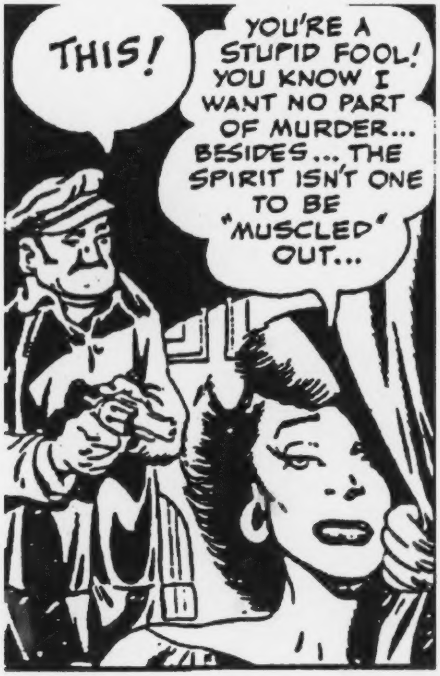
THIS!
YOU'RE A STUPID FOOL! YOU KNOW I WANT NO PART OF MURDER... BESIDES... THE SPIRIT ISN'T ONE TO BE "MUSCLED" OUT...

Figure 2

As a seventh grader, poring over Will Eisner's comic strip, The Spirit, in Baltimore's Sunday *Sun*, and Arthur "Bugs" Baer's daily humor column in the *News Post*, I experienced the first intense fascination with the fusion of word and image. Eisner was a master of weird angle shots, innovative layout, and punched-up street lingo (Figure 2). He is generally credited with adapting cinematic techniques to the comics (Daniels 137). Baer played the droll hip hick ("He was tighter than a fat boy's suspenders"). I was transported into a dulcet world of graphic and verbal play.

Fifth, research in learning styles and dual brain function exposes prevalent reductionism. Schools are mainly concerned with educating only half of the human brain, shunning the intuitive, holistic, and analogic aspects. There are two key differences, Bernice McCarthy says, in how we learn: "The first is how we *perceive*, the second is how we *process*" (3). The movement through the major learning style dimensions, she says, is the learning process itself: "The movement is from experiencing, to reflecting, to conceptualizing, to tinkering and problem solving, to integrating new learning into the self" (60). She urges the creation of learning environments where alertness is fostered by teaching to all four learning styles, using right and left mode techniques. I urge my advertising students, "As a copywriter, think like an artist. As an artist, think like a copywriter" (see Winters 107-156).

This lesson is an attempt to locate some common *perceptual* and *process* heuristics--basic learning skills shared by drawing, reading, writing, and math. Further, in this demonstration I will use drawing as the unifying agent.

1. Stroll the Two-Way Crosswalk

The first step is to sensitize the student to visual/verbal links. The ability to generate fresh metaphor is the two-way crosswalk to visual literacy. Common experience linked to uncommon association leads to individuality of expression. Each student selects a fresh green onion or a radish, a felt marker, and a sheet of drawing paper.

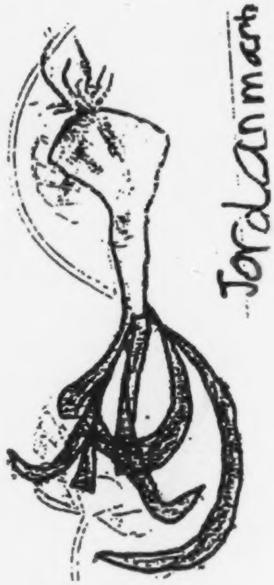

Figure 3

Each onion will find a radish partner and work together as I lead all participants through the creation process. Hold your vegetable, root down. Observe it very closely. Draw it. The bottom of the root is half way up on the paper. Fill up the top half of your paper with the drawing. Spend five minutes on the drawing. Now turn the paper, root side up. Look at the vegetable head. Discover an illogical but illuminating shared attribute (an onion is *layered*; a radish is *pungent*) with a real person (yourself, a relative or friend, a politician, a celebrity). *Relax and stroll the crosswalk*! In early March my art club students sketched wild onions on scraps of wallpaper. After completing her marker and Craypas piece (Figure 3), Jordan, a first grader, exclaimed: "This looks like a head!"

2. Retrieve the Mature Memory of a Deep Experience

Do the improv actor bit with your partner. Perhaps recall an interesting problem in human relations from your life and project into your talk. Play with your partner: associate, relate, agitate, celebrate. Ask a question. Issue a command! Beg for a favor. Object to an act. Disagree with an opinion. When you discover an interesting conflict, play it up.

3. Discover the Caricature/Caption Link

Use *New Yorker* cartoons, fables, live drawings, and caricature theory to show content of gestures and mimicry. The cartoon provides a simple vehicle for students to reclaim their paralinguistic potential. In Cicero's analysis of the chief sources of laughter, "a witty saying has its point sometimes in facts, sometimes in words, though people are most particularly amused whenever laughter is excited by the union of the two" (254).

Al Hirschfeld, whose caricatures appear regularly in the *New York Times*, says: "The enigma of personality is elusive. The adventure of translating personality into graphic symbols defies classification. I consider a successful likeness has been achieved when the subject begins to look like the drawing rather than the other way around" (Staake 117). When I look at Mort Drucker's masterful drawing (Figure 4), I find I can *do* Marlon Brando's Godfather. The incisive caricaturist executes a fusion of image with words.

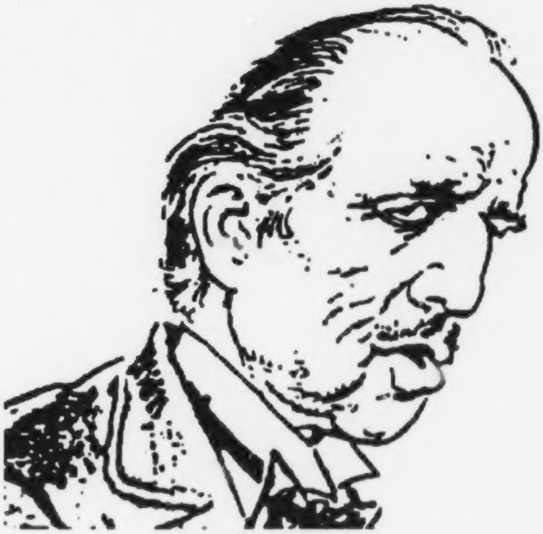

Figure 4

If you feel comfortable, exchange drawings and let your partner do your face. You may want to do your own. Use gestures and mimicry to communicate. A caricature is mimicry in line. Exaggerate and punch up your partner's expressions. Be alert to the ratios, measurements, and placements of the triangle points (two eyes and mouth) of your caricature. Discover the spoken phrase that resonates the caricature. Supply the key dialogue exchange.

4. Elevate Communication to a Pleasurable Performance

We put it all together in doing impressions and performing slices of talk. "Dialogue is the chocolate-covered munchies of fiction reading" (Provost 130). Ten hints: Practice phrase-turning. Appreciate one-upmanship. Avoid heavy-handed talk. Move the action. Let caricature and words resonate. Ratchet up tension. Exaggerate and burlesque. Milk the dialogue. Let puns and word play happen. Give the reader his money's worth.

Touch, feel, and contemplate the solid geometry of your veggie head. I can't help it--whenever I look at an onion (and it doesn't have to be a Georgia Vidalia) I think of Jimmy Carter. Toward the end of his term, he became the Sad Sack president. He always seemed to major in petty details. At the White House dinner table, he is picking on daughter Amy (Figure 5).

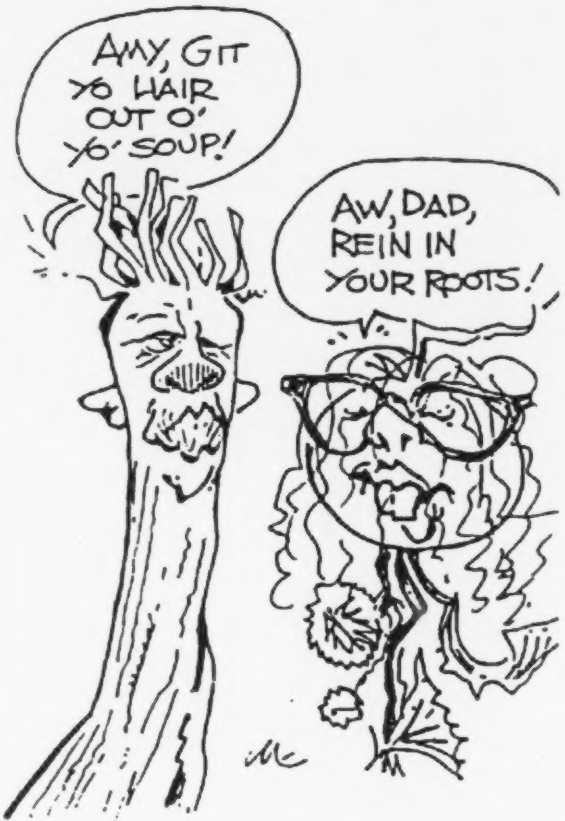
AMY, GIT YO HAIR OUT O' YO' SOUP!
AW, DAD, REIN IN YOUR ROOTS!

Figure 5

Conclusions

Cultural conditions have conspired to produce a horde of gray youth invading our institutions of higher learning: affluent, bored, and dulled by learning. Is it too harsh to say we are raising a generation of mumblers and expressionless dolts? The enormity of the problem is demoralizing. However, I believe art--*if it is taught as a true basic and in a manner that totally engages the student*--offers the best hope to energize all of learning.

The first thing we can do is identify the heuristics common to drawing, reading, writing, and math. Howard Gardner's *Frames of Mind* is helpful on the latter, but the prescriptive demonstrations are yet to be executed. Betty Edwards suggests that a limited set of integrated visual-perceptual strategies can be incorporated into a reading and writing learning model. She terms these five strategies "the heuristics of seeing": edges of a problem, negative spaces, relationships and proportions, lights and shadows, and the *Gestalt* (127). My little Talking Veggie lesson is a modest attempt to show how drawing can coalesce, cohere, and clarify learning.

The second thing we can do is formulate a common verbal/graphic vocabulary. We might begin by thinking of the form, space and time aspects shared by grammar and art. A *noun* suggests shape and form. A *pronoun* repeats the shape. A *verb* is the dominant feature of a sentence; like the cartoon panel, it signifies time and, like the caricature, indicates action and passion. An *adverb* is an expressive line. *Adjectives* and *articles* give color and shadow. *Prepositions* and *conjunctions* depict direction, proportion, and relationship.

The third thing we can do as teachers is to revive our spirits. Some of us need to go down to the river. Rediscover a child's perky, wide-eyed way of looking at things. Rouse and exalt the imagination. Surrender to a fertile inventive obsession. Reclaim the wonder in learning. Aristotle was smart and honest enough to observe that learning and wondering restore our natural condition. An art major at Indiana University, over sandwiches in the Green Room, told me quite seriously, "I want to paint the face of God!" She had not yet learned to mix her colors. She will never paint the face of God. But if she retained the passion for her craft and sought to share it--she has caught the glimpse of angels.

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SCIENTISTS WEAR WHITE AND POETS WEAR BLACK: INTEGRATING CREATIVE WRITING AND SCIENCE IN THE CLASSROOM

Sandra Steingraber

Undergraduate education too often reinforces false dichotomies between science and the arts. In the typical science classroom, students are evaluated with short-answer "objective" tests and perform experiments to which their emotional response is considered irrelevant. In introductory creative writing workshops, students are instructed in New Critical lyricism in which the affective Self is considered primary, and the elements of the outer world are made to bend to the need for unity in imagery, plot and tone. Pedagogy in each of these spheres can be improved by appropriating the best approaches of the other. This paper describes several of these techniques and argues that the need for artists and scientists to collaborate in the classroom is made urgent by the ongoing ecological crisis.

> It is deeply irrational to refuse to look at the relationship between how an individual chooses to create knowledge about the natural world and the kind of world that such knowledge makes possible.
>
> (Fausto-Sterling, 1991)

Scientists wear white; poets wear black. Scientists are rational; poets are creative. Scientists do research; poets emote. Laughable stereotypes? Perhaps. But, undergraduate education too often reinforces the false dichotomy between science and the arts. In the typical science classroom, students are evaluated with short-answer "objective" tests and perform experiments for which only one outcome is considered correct and to which students' emotional response is considered irrelevant. Real scientists, of course, are motivated by powerful emotions, deal with large amounts of uncertainty, and write in highly metaphoric language. In the typical introductory creative writing workshop, students are instructed in New

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Critical lyricism in which the affective Self is considered primary, and the elements of the chaotic outer world are made to bend to the need for unity in imagery, plot and tone. Real authors, of course, research their topics, need keen observational skills, and are as involved with the social issues of their times as with plumbing their souls.

By misrepresenting the creative process in both fields, the segregation of introductory science and creative arts curricula into "objective" and "subjective" camps is intellectually dishonest. It is also exclusionary. As a person who wears both black and white (working as a poet and as a research biologist and having taught pre-med biology, as well as creative writing workshops), I have observed this process at work in both directions. In the first case, undergraduate students who identify themselves as "linear" or "logical" often assume they cannot, therefore, also be "creative." In the second case, undergraduate students who identify themselves as "intuitive" or "artistic" are very likely to report feeling alienated by science. (The cause and effect, here, is not always clear: A bad experience in a science class can sometimes trigger a suspicion that one must, therefore, be an "artistic" person.)

Much important research on the exclusionary nature of science education has been conducted by feminist scholars who have demonstrated how an a-historical and hyper-rational science curriculum can make the science classroom an alien and hostile place for women and people of color in particular. Ann Fausto-Sterling (1991, p.5), for example, has pointed out that students decide whether to pursue a line of study based not only on their intrinsic interest in the subject matter but also on a "comfort index" that reflects how they feel in the classroom and in the presence of their teacher. In my experience with students, feelings of intellectual inadequacy in the science classroom breed either science phobia or outright anti-science hostility. Either way, these students abdicate their responsibility to understand and hold informed opinions on the activities of the scientific community.

Less research has been done on the comfort index of creative writing classes (probably because the academic recruitment of novelists and poets is not considered a national priority. . . .), but the presence of what Marxist critic Walter Kaladjian calls "the romantic doctrine of expressive lyricism" (1989, p.xiii) and what feminist critic Jan Montefiore calls "unrecognized Romanticism" (1987, p.8) in the academic writing workshop accounts for some of its exclusionary nature, as I will argue further below.

Pedagogy in both of these spheres can be improved by appropriating the best approaches of the other. Journal-writing exercises that encourage students to examine their own responses to scientific material can help students overcome science phobias and hostilities; creative writing projects in introductory science classes can serve as a window into the humanity (or inhumanity) of scientific endeavor. Conversely, bringing science and scientists into the creative writing classroom can serve as a point of contrast to the tenets of Romantic lyricism and can provide a fresh source of imagery and language. While the techniques described below cannot, in themselves, counteract systemic racism and sexism in higher education, my hope is that integrating science and creative writing will, in some small but significant way, help to raise the "comfort indices" of both classrooms.

Creative Writing in the Science Classroom

Science is a form of human inquiry, a particular way of looking at the world. Certain written conventions not withstanding, science does not exist as a special form of discourse. With these premises, bringing creative writing into the science classroom becomes a fairly easy task.

Whenever possible, I present scientific knowledge in the classroom as socially constructed and historically rooted. In human anatomy, for example, the conceptual division of the human body into mechanical and reductionary "systems" (reproductive, digestive, circulatory) is not simply an inevitable truth, but has its specific historical origin in medieval and Renaissance Europe and as a reaction to religious doctrine which once criminalized human dissection as heretical. Stories of early European anatomists secretly digging up bodies in the middle of the night in order to avoid arrest put a new spin on the reasons for a mind/body split in medical science, an intellectual legacy which so many non-science students find oppressive and dehumanizing--which, of course, it can be. Asking students to write about both the victimizing and the liberating aspects of the mechanical/reductionist approach to the human body--as they have experienced it--almost always produces interesting and compelling essays. Asking students to compare the illustrated representations of sexuality in their textbooks (the "reproductive tract") with the controversial photographs of Robert Mapplethorpe or Annie Leibovitz (male nudes, the pregnant Demi Moore) also provokes many creative observations. The goal here is to continually emphasize that Western science is only one lens--albeit, a dominant one--through which to view the world. If students of non-scientific temperaments can have their world views confirmed as valid and important, they are more likely to give science a try--especially if they sense that there is room to be critical of its cultural authority.

Towards these ends, journal-writing, as it is used in creative writing classes, can be an important tool in the science classroom. The journal can serve as the place to answer the kind of directed questions described above, to practice imaginative and speculative thinking, and to express emotional responses to the subject matter. As is frequently done in creative writing workshops, I often ask my students to role-play in their journals: "Walk through your neighborhood as the ecologist Barry Commoner and describe your observations. . . . As a contemporary geneticist, appear to Charles Darwin in a dream and tell him how his notions of heredity have been modified in the 20th century. . . . Write a dialogue between biologist Paul Ehrlich and a Third World mother on the topic of human population growth. . . . From the point of view of a red blood cell, trace your journey from the heart to the brain and back. . . .," and so forth. These exercises often evolve into essay questions on exams, so that students feel they have a stake in developing their ideas in their journals. The journal also codifies for students the concept that scientists are also writers who brainstorm and revise ideas and hold strong feelings and opinions toward what they do.

I frequently bring short stories, poems and creative non-fiction into my biology classes for in-class analysis. A poem about AIDS or a story about eating disorders presents the emotional experience of illness and can often pique a student's interest in knowing more about the underlying biology of the topic. (What part of the brain controls vomiting? How exactly does laxative abuse lead to vitamin deficiency?) These poems and stories can also provide opportunities to discuss the political and economic aspects of science and medicine. In the case of AIDS, I think it would be inhumane and irresponsible to launch into a detached discussion of virology without in some way acknowledging the horror, stigma and denial that are as much a part of this disease as the HIV virus itself--and have deeply affected the medical research community's own understanding and response to AIDS. In my ecology class, students often react to the lessons on global warming and the ozone hole with profound despair, a response which can all too easily settle into a generic feeling of helplessness and non-interest. By examining the works of artists and writers who are taking the global ecological crisis as their subject matter, students can see how art can transform what victimizes us into a force for social change.

More formalized creative writing projects in the science classroom can also be very successful. At Columbia College (an open-admissions, arts and communications school), all science classes require that students complete an individual "project" which explores--through writing, video, music or performance--some topic covered in the course. Writing projects, in particular, seem to be good vehicles to explore the humanity (or inhumanity, again) of scientific endeavor. Last semester, one of my students wrote a short story about an anxious Charles Darwin setting sail on the Beagle at age 23 (also the age of the student author). Another explored the concept of endangered species in a series of poems inspired by zoo observations, library research and interviews with zoologists. A third wrote a novella about toxic dumping in south Chicago in which the health effects suffered by her characters were carefully researched and accurately portrayed. Yet another group of students performed a play in which Jewish characters discussed the question of whether Darwin should be held partially responsible for the Holocaust.

Science in the Creative Writing Classroom

In his analysis of the social text of American poetry, Kalaidjian (1989, p. 3-32) argues that the recent institutionalization of creative writing in the academy was accompanied by the privileging of the lyric narrative as a creative form. The assumption that a writer's emotional Self, informed by personal experience, is the sole source of creativity acquired a cultural authority that depoliticized the act of writing and restricted writers to "personal narratives of private, existential angst" (p.9). This understanding of creative writing was buttressed with the theoretical tenets of New Criticism, which valorized unity in tone, imagery and narrative: all elements should work together to create a consistent, affective mood.

Now that the theoretical basis of New Critical methodology--in which I myself was certainly instructed--is being re-examined, revised and deconstructed, there is a new opportunity to re-think the pedagogy of creative writing workshops. Workshops in which the lyric narrative is presented as the only legitimate form--and, in which personal experience is recognized as the only legitimate content--exclude and marginalize writers whose creative source lies elsewhere. The entire tradition of the Avant-Garde--who did not necessarily strive for unity as an artistic goal--has largely been ignored in the undergraduate writing classroom, but could be used to great effect. The writings of John Cage, for example, which were frequently produced through "chance operations," are fascinating to students interested in mathematical ideas, randomness and probability. (See, for example, "Lecture on the Weather," 1979, pp. 3-9.)

Bringing the language of science into the creative writing classroom, in the form of articles from the scientific literature or quotes from scientists in the press or scientist guest speakers in the flesh, can be a very interesting experience. First, the proclamations of scientists are privileged in our society; asking students to interrogate the authority of this discourse reveals to them how powerful language can be. Second, as the literature of science fiction and cyberpunk can attest, scientific metaphors and images are rich sources for stories and poems: ice-minus bacteria, chaos theory, strange attractors, food webs, black holes and so forth. Third, comparing scientific and poetic descriptions of Nature can serve as a means to understand the assumptions of Romanticism--which are sometimes so unconsciously encoded in students' writing as to be invisible to them. Giving students scientific questions that involve separating direct observations of the natural world from their interpretive insights is an important lesson in the value and limitations of empiricism as a way of knowing. Such exercises can also help students break through writing blocks or anxieties of influence.

Final Thoughts

To illustrate the hostile reception that women scientists have historically faced in the academy, Fausto-Sterling (1991) recounts the case of one of Britain's leading biologists who classified and described many species of fungus and discovered the symbiotic nature of lichens. Barred as a woman from joining the Linnaean Society of London and discouraged by the difficulties of using the British Museum, she gave up science and moved on to writing children's books. This person was Beatrix Potter. Fausto-Sterling writes that her own discovery of Potter's scientific life produced an epiphany in her own thinking: "I finally understood that I did NOT have to admit that women had never done science. How many others were there, like Potter, whose work had been lost from view?" (p.7). And, I would like to ask, how many other creative writers and scientists have been forced to choose between one activity and the other?

And, how many creative writers and scientists never have the opportunity to speak with each other?

One of my favorite contemporary American poets is Margaret Randall. The American biologist I most admire is Ruth Hubbard. A few years ago, I was overjoyed to learn that these two women had co-authored a book based on their correspondence to each other (*The Shape of Red*, 1988). The text is a wonderful dialogue between two brilliant minds on all manner of topics, including the relationship between poetry and science. But, the first sentence of the introduction stands out in my mind as the most revealing: "We met in Nicaragua." That meetings between U.S. artists and scientists occur in foreign countries--so complete is our isolation from each other here--still strikes me as a sobering notion.

My point in telling both of these stories is that undergraduate students who rush to define themselves with labels they believe are mutually exclusive--"subjective" (and, therefore, not good at science) or "objective" (and, therefore, not artistic)--are not simply naive. On one level, they have correctly perceived that to be accepted by one community means being excluded from the other. Or, for reasons of gender or race, exclusion by one community may mean choosing the other by default. To try to work in both worlds can seem schizophrenic. However, I think these two worlds--the training grounds for science and the boot camps for writers--can and should change.

The global ecological situation makes this need for change so urgent. As a human condition which requires a new language, the environmental crisis requires that scientists and writers join forces. Bringing poets into the science classroom and scientists into the writing workshop is a catalyst for change.

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LINKING TECHNOLOGY WITH NONTRADITIONAL/INTERDISCIPLINARY EDUCATION

CREATING LEARNING COMMUNITIES THROUGH TECHNOLOGY

Erwin Boschmann
Susan A. Frantsi

In cooperation with the Annenberg/CPB Project, Indiana University-Purdue University at Indianapolis has established an Electronic Learning Network to reach those students who are isolated from the campus through social, psychological and/or economic barriers. A non-majors chemistry course is among those broadcast from our state-of-the art technology lecture room. The room contains 52 pieces of technology, including a versatile document camera for tight close-ups, a demonstration table complete with camera, and full range of computing capabilities. In addition to live televised lectures (with two delayed rebroadcasts), other technologies available to students include telephone, e-mail (for office hours), FAX (to submit homework assignments), interactive video disc tutorials (for self help), voice mail (for non-synchronous communication), audio conferencing, and video tapes (for taped lectures and for some laboratory experiments). The versatility of the room and samples of technologies used will be demonstrated. The laboratory experience presented a special challenge since there is no precedent of performing meaningful, safe, legal and credible chemistry experiments in the home. A series of experiments has been designed and implemented using take-home equipment and chemical kits as well as the use of video-recorded procedures for the more dangerous experiments. The results of preliminary evaluation data will be shared.

Much has been said and written in recent years about the "new majority" student. Older, professionally aspiring, employed, head of household, they are often part-time students blazing the trail for their family as first generation college

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students. They are, for the most part, capable of handling courses leading to a baccalaureate degree, are definitely goal oriented, determined, self disciplined, are hampered by time constraints and in desperate need of opportunities with built-in flexibility.

Along with other institutions across the country -- especially those in urban settings -- Indiana University-Purdue University at Indianapolis (IUPUI) has made major efforts to accommodate the very special needs of this ever increasing segment of our student population. As a major urban university with nearly 28,000 and over 1,300 full-time faculty offering 167 degree programs ranging from associate through the doctorate, IUPUI is well situated to speak to the needs of the nontraditional student.

Some time ago it became clear to us that among these new majority students there is a sub-set of very special students; namely those capable high school graduates who have all the attributes enumerated above, but who, for whatever reason, are hindered by social, economic or psychological barriers, and therefore have chosen not to pursue higher education, or more likely, have never even considered it. This sense of isolation is often reinforced by a perceived intellectual gap between the student's social standing and the ivory tower myth. The university environment is foreign to them (the last thing they'd do is visit a faculty member in the office, or sit in class among several hundred students), the advantages of further education are not immediately obvious, and the result is satisfaction with the *status quo*. There are many such potential students, especially in the urban centers where blue collar employment is more readily available, and where family tradition has never emphasized the need for further education. Because these students generally have a natural affinity for, interest in, and access to electronic devices, IUPUI saw an opportunity to match interest with need.

In 1988 IUPUI undertook a comprehensive self study which yielded an academic plan charting the course of action through the year 2000. The plan recognizes the power and potential of technology as a pedagogically sound tool to educate the masses. The plan states: "Involving libraries, computer networks, interactive video, graphics and other media, the learning center of the next century is certain to make available applications tailored for home or office use. As a new campus still developing its electronic infra-structure, IUPUI has already begun to prepare itself for a different, though still uncertain, form of education."[1]

Since learning is most successfully accomplished when the student takes an active role as participant, rather than the passive role as observer, technology is a natural conduit to learning, since it affords the opportunity to provide many settings of student engagement. The instructor may bring to the classroom live interviews with experts directly from the field, or show rare artifacts only available in museums; perform experiments on a very small scale, yet displayed on large screens; electronically interact with students to receive instant and anonymous feedback; give the students an opportunity to do special projects; use animation to view the world of the unseen and abstract; or provide interactive video/computer tutoring. Creative writing students may compose on screen, and at will share their work screen-to-screen with fellow classmates or the instructor. A literature class might discuss a work with all students commenting at the same time using their keyboards displaying each student's observations in sequence on a large screen, with instructor comments running parallel on a separate screen. Psychology students might observe both stationary and moving optical illusions or test their signal detection ability from a changing pattern on a screen. A political science class might have a face-to-face meeting, via satellite, with a class at Moscow State University discussing the Cuban missile crisis. A drama student might stage a scene and allow the act to play while watching the effects of light and sound on the mood. Engineers can do computer aided design, and geologists run sedimentation simulations, while French students might compare directly the Parisian with Canadian French. Public health students might examine AIDS policies from a data base that addresses the moral, legal, psychological and medical outcomes of specific scenarios. With possibilities such as these, it soon became clear that there existed a natural link between IUPUI's commitment to serving the hesitant, nontraditional student and its commitment to exploit the power of new and emerging technologies. A two-prong approach was used.

First, a conscious decision was made to equip the campus with electronic teaching and learning tools, with special focus on the 450-seat auditorium which was converted into an electronic classroom (see Exhibit 1). LE101, as this classroom is known, has become a laboratory for teaching and learning for faculty and students alike. The classroom has also become the natural linkage for those students in the community who are capable of college work, but unable or unwilling to come to the campus. LE101 permits the university to bring its offerings to the students, with all intricate course details, including a laboratory experience.

The second initiative taken by IUPUI to attract the hesitant new majority student was a grant application to The Annenberg/CPB Project. Entitled the Community Learning Network, the project was funded to "bring together a number of separate strands of campus development into a coherent program. It is designed to increase access for historically excluded groups and to build a network for learning by using electronic technologies to make interaction among student more effective."[2] Its objectives include attracting students to baccalaureate programs who have been previously discouraged because of social and/or economic barriers; to create an atmosphere of excitement for learning; to create learning communities off campus; to engage effective, full time faculty; and to ensure the self perpetuation of the program. Students must meet University enrollment and placement guidelines.

Four community sites were selected: a vocational college, an interdenominational church center, a Hispanic center, and a social agency community center. Each site is provided with capabilities to receive and/or tape television broadcasts of the courses taught on campus. In addition, e-mail is used for office help, FAX for homework transmittal, interactive videodisc/computer programs for self tutoring, and telephone and voice mail for messages. In addition to the lead faculty member, a junior faculty member assists, as do peer mentors and teaching assistants who visit the students on site. In order to ensure that students make a serious commitment to the task at hand, each was asked to sign an agreement known as the Our Promise/Your Promise document (see Exhibit 2).

A most challenging portion of the course design was the laboratory experience for a course such as chemistry. How does one design a set of experiments which is safe to conduct in the home, easy to do without the benefit of supervision, legal in that it instructs novices to mix chemicals, and still maintain the credibility of a *bona fide* laboratory experience no different in content than for those students on campus? The approach to meet these challenges has been discussed elsewhere.[3] Its key ingredients include the following. Whenever possible, chemicals were chosen which are already present in the home, such as mothballs, bowl cleaner, vinegar, etc. The decision was made to do all experiments on a microscale using micro test tubes, beral pipets, etc. in order to reduce the danger of accidents and contamination. Some basic equipment, such as a thermometer, a spring scale, and test tubes, is provided to the student in a kit to be kept for the term, and a kit with some chemicals is supplied on a weekly check-out basis. All experiments were carefully tested ahead of time in the home setting thereby ensuring clear and straightforwardly written instructions. Finally, the entire package was submitted to both the campus safety officer and legal counsel for their comments.

A review of the literature indicates that, generally speaking, performance by students engaged in distance education is no different than for those in traditional settings. Our experiences confirm these findings. The majority of the students liked the flexibility and convenience of the set-up. Student observations include such comments as "I am very relaxed; I could not have taken this course, if it were not offered using this format. Take-home labs are really neat and fun, but they take a lot of time."

Based on our two-semester experience, with fewer than twenty students, we are able to make the following observations. In urban environments there is an untapped pool of persons capable of college work. That segment of the population is most readily reached on its own terms, providing familiar tools and flexible schedules. Delivery of such courses is labor intensive, demanding major curricular revision. Distance education courses can be organized to meet all academic standards. While the program must be supported by the administration, its design must be the responsibility of the faculty. Finally, the concept requires time to mature in order to enjoy widespread acceptance. In this context it is perhaps sobering to remember that it took a hundred years for the printing invention, the book, to finally make its way from the monastery to the school; and it took the overhead projector thirty years to move from the bowling alley to the classroom.

Exhibit 1: IUPUI'S LE101 ELECTRONIC CLASSROOM CAPABILITIES

- Multiple screen for simultaneous or sequential image projection from several media
- Three video projectors with multi-sync and improved definition (IDTV) capabilities for video and computer display
- Video still frame capture and playback
- Demonstration table for scientific applications with video magnification and overhead cameras, hot and cold water, compressed air, natural gas, vacuum system, exhaust
- Lectern with electronic control menu panel
- Three microcomputers IBM, Macintosh, and NeXT with a multisync monitor in the lectern (the computers are connected through the Campus Broadband Network to the mainframes)
- Powerful document camera for close-ups
- Large screen computer display available through the videoprojectors
- Electronic writing pad connected to video projectors; wall-mounted marker boards
- Dual 16-mm film projectors with automatic changeover (multi-reel movies can be shown without stopping to change reels)
- 35-mm slide projector with high-intensity output
- Projection booth at rear of room
- Video origination control booth to allow multi-camera productions for broadcast to other sites via IHETS or satellite
- Zoned lighting
- Improved heating and cooling
- Audio playback in all standard formats
- Videotape playback in VHS, S-VHS and 3/4" format
- Audio and video origination and/or recording
- High fidelity distributed sound public address reinforcement
- Upholstered seats wired for interactive student response devices in anticipation of future needs
- Architecturally redesigned room acoustics
- Improved sound isolation from surrounding areas
- Press box feed for news conferences

Exhibit 2: STUDENT COMMITMENT FORM

Indiana University-Purdue University at Indianapolis
Elementary chemistry, C101

Our Promise / Your Promise

The staff at IUPUI welcomes you to the presentation of Chemistry, C101. It is our sincere desire to assist you in every way possible to obtain the skills necessary for successful completion of the course. In order to help you with this process, we promise

a) to provide you with all the materials you will need (except routine household chemicals);
b) to provide you with complete information and help on the use of all technology aids used;
c) to provide you with regular personal and electronic contact with the staff;
d) to offer you "unlimited" office hours in the form of the electronic mail;
e) to assist you with specific problems in the proper use of your time and study techniques; and finally
f) to be well prepared, and to teach to the best of our abilities.

This we promise

____________________________ ____________
Erwin Boschmann, Professor Date

However, no matter how much we do, the only way that true success can be achieved is through your firm commitments to your responsibilities as a student. To fulfill these responsibilities you should promise yourself (and us) that you will

1. View the lectures regularly and punctually. Let the staff know if you cannot attend. Don't miss this opportunity which could change your future.
2. Make sure you adequately prepare for class beforehand. A chemistry class requires at least 10-15 hours/week of study outside of class time in order to achieve moderate success. Studies include homework, outlining, doing demonstrations and experiments, write-ups, interactive video lessons, etc.

PROPER TECHNIQUE FOR STUDYING CHEMISTRY

a. Read all pages pertaining to the lecture *before* class time.

b. Re-read these pages after lecture, doing all examples.
c. Do the interactive video lessons relating to the lecture.
d. Work the odd numbered problems in the text.
e. Work the homework problems.
f. Review and prepare for the quiz by working the remaining problems, going through the Study Guide, solving its problems and completing the self tests.

3. Make use of the many different resources available to you in addition to the lecture. Use them! These include a regular recitation and the presence of a Teaching Assistant available during office hours for additional help; an on-site peer mentor to help with the course mechanics and answer questions; at home assignments to help illustrate concepts from class; and the electronic mail.
4. Participate in Study Groups. Research shows that successful students benefit by forming a study group with other students in the class. Try to arrange for such a group.
5. Adequately prepare for the laboratory session. Laboratory experiments are designed to help reinforce concepts learned in class and give you a chance to see chemistry in action. To benefit from the experiments, you must read the experiment background material before starting, complete the pre-lab assignment, do all assigned laboratory activities, and complete the data sheet. Note that a few laboratories will be performed on campus.
6. Remember that learning is an active, not passive, process. Therefore, ask questions, become involved and seek help when needed. About 25% of your study time should be devoted to passively reading. The remaining 75% of your time should be devoted to "doing" activities such as homework, outlining, laboratory write-ups, study groups, sample quizzes, etc.

The chemistry staff is committed to help you fully utilize all the available resources to achieve academic success. But it requires a combined effort from you and from us. By signing this agreement you are fully committing yourself to the proper academic process. The steps outlined here are based on many years' experience and will give you sure guidelines to follow in order to succeed.

I promise to abide by the above to the best of my abilities.

Signed________________________________ Date___________________

Printed ______________________________

Endnotes

1. "IUPUI Development Plan: 1988-2000," February 1, 1988, p. 5.

2. "Community Learning Network -- A Collaborative Proposal to Establish an Electronic Learning Network in Indianapolis," submitted by IUPUI to The Annenberg/CPB Project on May 11, 1990.

3. "Teaching Chemistry Labs Via Distance," Susan A. Frantsi and Erwin Boschmann, paper presented before the Hoosier Association of Science Teachers Convention, Indianapolis, IN, January 31, 1992.

THE VIRTUAL CLASSROOM: USING TECHNOLOGY IN DISTANCE LEARNING GRADUATE EDUCATION

Mary A. Mishler

Nontraditional programs lead the second wave of innovative applications of technology in higher education. As educators adapt concepts of virtual reality to meet the challenges of distance education, the resulting virtual classroom extends many advantages of the traditional campus learning environment to alternative settings. Creative technologies have made profound changes in the ways we live and learn. This paper explores some potential risks and benefits of the virtual classroom.

"Virtual Reality" is a buzzword of the 1990s. Early experiments in creating an artificial reality through computer simulation and other combined technologies date back to the seventies and have had widespread applications.

A search of recent periodicals on the topic of virtual reality uncovered articles ranging from highly technical descriptions of NASA-sponsored research to articles about the ethics of creating virtual reality editions of games such as *Dungeons and Dragons.*

For the average person, virtual reality conjures up the notion of the simulated cockpit used in flight instruction or, more recently, the much talked about goggles and gloves that provide a convincing illusory experience, or the total immersion "cyberspace."

Whether the concept is applied to scientific attempts to recreate and study planetary landscapes in laboratories or for entertainment, the main point is the extent to which we construct our reality.

The virtual classroom has its humble beginnings in televised courses. After all, televised courses were not so different than the contemporary but now out-dated forms of pedagogy. The instructor lectured or demonstrated an exercise and the class

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passively observed. The virtual classroom, however, is patterned after androgogical methods in order to be much more interactive.

With the right equipment students may create learning experiences similar to students on-campus. They may interact with their professors and other students through e-mail. They may join a discussion via a teleconference or seek financial aid advice from an administrator. They may collect data from a laboratory or library through on-line electronic networks.

In other words, they may benefit in terms of convenient access to most of the necessary services and requirements of seeking a degree. Of course, students do not have the qualitative on-campus experience, the technology is costly to own or lease, and the necessary skills are somewhat sophisticated.

Unlike the traditional campus-based experience where classes meet on a regular schedule, many nontraditional students utilize technology according to patterns that conform to their lives and learning styles. Thus the student assumes more responsibility for taking an active role in the learning experience and mastering the skills required to use the technology.

A brief retrospective on the problems and experiments in the applications of technology is useful in assessing the risks and benefits of the virtual classroom.

In 1985 an assessment was done on five years of teaching via computer at the Electronic Information Exchange System (EIES) at the New Jersey Institute of Technology. The results were reported by Murray Turoff and Roxanne Starr at a conference in May 1986. Their paper, "Remote Learning: Technologies and Opportunities," summarizes their findings as follows: 1) most students were comfortable with the medium but felt inhibited in using the equipment; 2) students who did not score as well were those with overall lower GPAs; and 3) teacher/student relations took more of the teachers' time.

The EIES classes were undergraduate courses in computer science and management information systems. However, one could assume certain similarities among the students who were surveyed and graduate students who elect distance education options over more traditional choices. Namely, the enrollment was voluntary and students who choose this method of learning may have been fairly computer literate.

The applications of technology have become much more sophisticated since the early 1980s. The second wave of technology has created learning environments via satellite, modem, electronic mail, and teleconferencing. Computers are equipped with graphic interfaces and touch screens and speech synthesizers. National data networks instantly transmit information via fiber optic cables.

Network online communications provide the means of truly interactive off-campus classes, or the virtual classroom.

Dr. Norman Coombs is a professor at the Rochester Institute of Technology who describes some of the advantages via teleconferencing in his paper "Liberation Technology: Equal Access Via Computer Technology." Dr. Coombs teaches a course in African-American history where he encourages students to share personal experiences. He finds that students risk more under the anonymity of their computers. On the downside, there is occasional "flaming" or racist comments, but he has the prerogative to censor comments before general posting.

Furthermore, Dr. Coombs happens to be blind. He praises the technology for its usefulness in providing access to educational opportunities for students with handicaps. He uses a speech synthesizer and is able to communicate with hearing-impaired students and colleagues without an intermediary.

Aside from these advantages, there is controversy over the global impact of technologically transmitted education. Dr. Joseph N. Pelton presented a paper, "Technology and Education: Friends or Foes?" at the Fifteenth World Congress on Distance Education, 1990, Caracas, Venezuela. He is a proponent of transmitting courses via satellite as a way of providing fair access to information particularly in developing countries.

A.W. Bates argues in his paper, "Third Generation Distance Education: The Challenge of New Technology" that the courses are prohibitive due to the expense. He further states that such courses are not interactive. He believes that print-based courses may be a more effective medium in developing countries.

Bates and Pelton agree that the course content is a critical factor in distance education programs in developing countries. Science and math are more universal and as such easier to translate across cultures than more culture-bound knowledge.

Not only are the more prescriptive disciplines of science and engineering better suited to distance education, it is within these disciplines that technology was created. Logically, some of the most advanced delivery systems are to be found in these fields.

Recently Massachusetts Institute of Technology teamed up with Hewlett-Packard, Co. and Motorola Inc. and a nontraditional university by the name of National Technological University to offer a two-hour teleconference for the purpose of attracting students to engineering. This satellite broadcast was transmitted to more than 375 sites and viewed by 8,000 students.

Nontraditional educational delivery systems such as the one offered by National Technological University (NTU) provide a service to a specific market. Founded in 1984, the University offers master's degrees in 10 engineering disciplines. The professors who teach through NTU hold faculty positions in 42 universities nationwide. The courses are useful to degree-seeking students as well as engineers with advanced degrees who wish to keep up with changes in their fields.

Lionel Baldwin, President of National Technological University, observed that while physicians and lawyers prepare for the professional practice with advanced degrees, engineers often enter their profession with only an undergraduate degree.

There are currently about a half dozen distance education universities that offer advanced degrees in the social sciences. Among them are Fielding Institute and Saybrook Institute in California, Walden University in Minnesota, and Union Graduate School in Ohio. All use technology in greater or lesser measures in their delivery systems.

The goal at Walden is to enhance the quality of the program by using technology to provide accurate information and faster service. Walden uses technology in the following four ways: 1)as an interaction between students, faculty, and administrators; 2) as a means to access resources such as national bulletin boards and other information networks; 3) to prepare and present instructional materials; and 4) to monitor student progress.

The Fielding Electronic Network (FEN) is among the more advanced in graduate distance education. FEN provides Fielding students cost-effective access to an electronic bulletin board and e-mail that works with Bitnet and through Sprintnet.

Advantages of the virtual classroom are great to students and faculty who exist outside the traditional space and time constraints of a campus. For example, a faculty/student advising appointment may occur even if one of the parties is traveling by air with the use of an airphone and a lap-top computer. Or a mid-career professional can collect data in the workplace and transfer it via modem to a faculty advisor.

Disadvantages are also apparent. The average age of a doctoral student in a distance education program is 44. This population does not necessarily possess the appropriate skills to make use of the technology. If they do, it can also be very expensive.

Despite the evidence that technology has permanently changed the way people live and the degree to which they achieve their goals, the application of technology in education is seriously underfunded and under promoted in relation to other fields.

Consider the apparent advantage of technology in terms of saving time. Time and funding are among the major concerns of students who pursue academic goals through distance education.

Numerous examples demonstrate how computers and related technology have been used to reconstruct our world, particularly as far as saving time is concerned.

Stockbrokers have been known to exploit the computer for its extraordinary capacity to rapidly transmit explicit data and in so doing, profit through margin trading. This was one factor among many that led to an economic shift in the United States of 60% of the wealth to 1% of the population in the last decade (*New York Times*, Business Section, 27 February 1992).

Medical applications far exceed the doctors' use in analyzing tissues and blood. Today a variety of techniques range from ultrasound imaging to computer axial tomography (CAT) scans. These non-invasive techniques are much safer and allow speedier recovery.

In the political arena rapid management information systems affect election outcomes when ballots in one time zone can be tallied and reported before polls close in another part of the country. Desert Storm recently demonstrated the combination of technologies that allowed a nation to watch radar missiles televised live via satellite.

In *The Soul of A New Machine* (Avon, 1981) Tracy Kidder describes the birth of computers and points to the exciting and seemingly limitless possibilities that accompany the technology. The past decade has demonstrated consequences that far exceed the author's predictions. These technological advances change, challenge and reconstruct almost every aspect of the modern world. The application of technology in education, although it lags seriously behind other fields, brings about tremendous freedom.

The virtual classroom, even the virtual campus, will become an increasingly attractive viable option for future students.

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VIDEOTAPED STORY LINES FOR CLASSROOM AND TELEVISED DISTANCE TEACHING

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Helping students understand and remember key concepts of nursing research requires innovative cuing and retention strategies. Videotaped instructional resources have been successfully used in a variety of contexts to improve content presentation. Not all studies involving videotaped instruction have demonstrated improved learning. To examine the relationship of teaching methods student encoding, storage and retrieval of information, a videotaped play was developed. The story line depicted a gold rush prospector who questioned the validity and reliability of the assayer's instruments. A comparison of traditional and non-traditional adult students was made as well as comparing the use of a story line to televised distance learners and "in classroom" usage. Implications for use of videotaped story lines were discussed.

Teaching basic nursing research concepts to undergraduate baccalaureate students presents a real challenge to the instructor. Students often need many specific and concrete examples to help them understand and incorporate ideas that may seem abstract and even alien to what they have previously experienced. Other nursing courses frequently are designed to provide immediate clinical examples of the problems that nurses confront, but many students enroll in the introductory research class prior to the personal incorporation of the nurse as researcher role. The author surveyed 110 students taking a required nursing research course. Students were asked to indicate the extent to which they were personally motivated to enroll in the class on a scale of 1 to 10. Only 5 students indicated moderate interest by marking three or above.

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The responsibility of helping students understand and remember key concepts of nursing research requires a variety of learning experiences and approaches. One approach available is through videotaped material. Videotaped instructional resources have been successfully used in a variety of contexts. Harvard Medical School uses tapes to teach and reinforce training goals for emergency care, and has found that videotape production with a story line and action sequences appeal to a wide range of students with diverse learning styles (Schoonover, 1983). The Albert Einstein College of Medicine uses videotapes to teach neurology, and found that more accurate diagnoses were achieved among students who received the videotaped instruction (Kaufman, 1983).

Not all studies involving videotaped instruction have demonstrated improved learning. Wayne State University and Stanford School of Medicine compared the use of lecture, videotape methods and simulated classroom patients to teach mental status examination. No clear differences in multiple choice examination scores were revealed, and students preferred whichever instructional method they had experienced (Pohl 1982, Sox 1984).

As an attempt to provide variety in sensory stimuli and a specific concrete example of research issues, a videotaped play was developed to illustrate methods of establishing instrument validity and reliability. In this play, a gold rush prospector brought his gold to be weighed at the assayer's office. The characters depicted approaches to establishing the honesty of the measurement procedures in a western movie concept. At the end of the video, definitions of the various procedures were presented, superimposed on still frames of the story's action. In addition, a viewing guide was developed for student use.

Method

A study was then conducted to examine the effectiveness of the videotaped material. Three groups of students enrolled in a required research course were taught basic concepts of instrument validity and reliability, using different approaches. One group was taught using traditional lecture and the blackboard. Students were encouraged to take notes and ask questions. A second group was taught in a classroom setting with all visuals appearing on a monitor. During the videotaped play students were asked to use the viewing guide (an outline of the validity/reliability methods) and to write down the action sequence that depicted specific methods. The third group was a distance classroom, receiving the course on a statewide closed circuit network. They too were using the viewing guide. All groups were encouraged to ask questions after the material was presented. The viewing guide outline was reviewed to ensure that the students had the proper action sequence related to the correct concept.

Students in groups one (N=12) and two (N=12) were generic students in a large midwestern baccalaureate program assigned to the groups on an every-other-one basis from an alphabetized list. Group three students were registered nurses returning to complete their degree and taking the course off-campus using an interactive television format. Twelve students were randomly selected from this class to comprise the third group. Five of the RN students enrolled in the off-campus televised classroom did not attend the class at the time it was televised. Because of employment or military duty, they watched the entire class session on videotape and did not have opportunity to ask questions or make comments. These five students saw the western play but did not have viewing guides.

The results of the various teaching methods were evaluated by a multiple choice examination 6 weeks later and a course evaluation requesting feedback about audiovisual aids used in the classroom.

The examination items had been used in previously taught courses, and computerized item analysis had established satisfactory levels of discrimination, difficulty and validity. The items had also demonstrated reliability across university sessions and class sections within sessions (.81 and .79 respectively).

Results

Analysis of variance was conducted on the students' responses to the relevant examination items. A significant difference (alpha=.01) in student scores existed with an F of 230.71. Group I students had a mean score of 7.6, Group II mean scores were 11 and Group III were 10.33. Further analysis of the data was completed using a "t" test to ascertain whether significant differences existed between Groups II and III. This disclosed a "t" of 14.375, significant .05 level with 22 degrees of freedom.

Discussion

Students who experienced the traditional lecture setting with visual stimuli presented only through use of the blackboard had lower examination scores than students who were taught using videotaped action sequences with a story line. On-campus students who were in a traditional classroom setting and exposed to the videotape scored the highest of all three groups. Perhaps the transition from live lecture to the distinctive format of the videotape cued students to attend to the material. This idea is supported by the difference in Group II and Group III scores. Students in the traditional classroom who had to switch attention from the lecturer to the videotape monitor scored higher than students who were already viewing the monitor because they were enrolled for the televised presentations. However, perhaps the traditional generic student is more accustomed to abstract, deductive thought and when the material is also presented in story form the educational effect is compounded.

One could argue that the reason groups II and III scored higher than Group I was solely an effect of the viewing guide. Students using the guide would be more actively involved in acquiring the information than students passively taking lecture notes. Happily, five of the off-campus students did not use the guide when they viewed the videotaped class session. Although the sample size is too small for statistical analysis, the mean scores of these five off-campus students did not appreciably vary from their colleagues who did use the guide. Group III mean scores were 10.33 and the five students achieved a mean of 10.4. This would indicate that the scores were more likely a result of the video than the viewing guide.

The problem of why Group II and Group III students performed significantly different on the exam is particularly intriguing since the returning RNs are generally highly motivated students and tend to be somewhat more concrete in their learning preferences. More exciting research could be generated to explore this question.

Although one could effectively argue that the actual differences between Group II and Group III are not that great, certainly the differences between Group I and the other two groups are statistically and educationally noteworthy.

Students responded positively to the videotape and in evaluating the course audiovisual materials, this item captured their interest and recall. Their evaluative responses indicated that the action sequenced story line enhanced learning.

STUDENT SCORES AND STATISTICAL DATA FOR GROUPS I, II AND III

SUBJECT	GROUP I		GROUP II		GROUP III	
	X1	$X1^2$	X2	$X2^2$	X3	$X3^2$
1.	8	64	10	100	10	100
2.	7	49	11	121	10	100
3.	8	64	12	144	11	121
4.	7	49	10	100	10	100
5.	9	81	12	144	12	144
6.	7	49	11	121	10	100
7.	8	64	11	121	10	100
8.	7	49	9	81	9	81
9.	8	64	12	144	10	100
10.	9	81	11	121	10	100
11.	6	36	11	121	11	121
12.	8	64	12	144	11	121
	92	714	132	144^2	124	1288
	X1 = 7.6		X2 = 11		X3 = 10.33	

$X_{tot} = 348$

$X^2_{tot} = 3444$

Ntot = 36

t2,3 = 14.375 (df=22)

SStot = 80

SSbg = 74.66

SSwg = $\underline{5.34}$

MSwg = $\frac{5.34}{33} = \underline{.1618}$

MSbg = $\frac{74.66}{2} = 37.33$

F = $\frac{37.33}{.1618} = \underline{230.71}$

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CROSSING STATE LINES FOR MORAL PURPOSES: INTERSTATE AUTHORIZATION OF DISTANCE HIGHER EDUCATION VIA TELECOMMUNICATIONS

Kevin P. Reilly

The growing number of colleges seeking to offer distance education across state lines via telecommunications confronts a welter of state and other approval requirements. An institution that wants to operate nationally can face as many state assessments as there are states. The chilling effect of such repeated hoop-jumping upon the development of strong interstate telecommunications systems is obvious. This paper describes a new agreement among states to use the review of a distance education institution in the institution's home state as part of the approval process in other states where the institution seeks to operate. It also outlines a common information collection instrument that several states now employ for the evaluation of telecommunications distance learning programs.

Background to A New Interstate Agreement on Distance Higher Education Authorization

Between 1982 and 1984, the Project on Assessing Long Distance Learning via Telecommunications (Project ALLTEL) took the first steps in addressing emerging issues of state authorization and voluntary accreditation as they apply to higher education delivered across state lines by means of telecommunications. The project sought to frame the legal, regulatory, and quality assurance contexts of these issues. It also made recommendations about how the two chief gatekeepers in higher education -- the states and the voluntary accrediting associations -- should discharge their responsibilities for assessing credit-bearing coursework and degree programs offered across state boundaries through a variety of technologies. ALLTEL defined these technologies to include television, radio, video cassette or disc, computer, and any combination of these and other devices based on an audio-video format.

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Project ALLTEL's central recommendation to the states and the accrediting bodies was to coordinate their approval reviews of distance learning via telecommunications so that colleges and universities would not have to confront a welter of requirements from different jurisdictions and agencies around the country. Without this coordination, an institution that wanted to operate nationally could face as many state assessments as there are states, along with additional approval processes by six regional accrediting groups (not to mention professional or specialized accrediting associations that may be involved). The chilling effect of such repeated hoop-jumping demands upon the development of strong interstate telecommunications systems is obvious. ALLTEL pointedly emphasized the importance of the consumer protection and quality monitoring roles of states and accreditors, while it proposed a strategy for a more cost efficient and effective deployment of their, and the colleges', resources in assessing distance learning.

The proposed strategy placed primary responsibility for ensuring the integrity and quality of an institution's courses and degree programs on the college's home state authorizing agency and the appropriate accrediting body, whether national, regional, or specialized. The home state and the institution's accreditor were to vouch for the quality of telecommunications instruction to other states and accreditation groups. An institution seeking authorization for telecommunications instruction in its home state and elsewhere would complete an institutional profile designed by Project ALLTEL to elicit crucial information about the college and its telecommunications operations. The home state and the relevant accrediting association would audit the completed profile document, including making any visits to the institution they believed necessary, and if warranted approve the telecommunications activity as part of the institution's recognized status. In the process, the home state and the relevant accrediting association would certify that the institutional profile was complete and accurate. This certified document could then be made available to any other states or accreditors from whom the institution might need to seek approval. These other state agencies and accrediting bodies might request additional information, or visit a receiving site within their jurisdiction, if they believed either or both were necessary to make their determination. (Chaloux 1985, 51-54).

The State Higher Education Executive Officers Association (SHEEO) and the Council on Postsecondary Accreditation (COPA) jointly sponsored Project ALLTEL. SHEEO comprises the chief officials responsible for state-level coordination and planning of higher education across the country. COPA is the umbrella organization for voluntary accrediting bodies. Both COPA and SHEEO formally adopted Project ALLTEL's recommendations. It was then left to individual states and accrediting associations to implement the Project's principles and procedures.

As Project Coordinator Bruce Chaloux noted in the 1985 Summary Report on ALLTEL:

> Crucial to the proposed strategy is the acceptance by other state agencies and accrediting bodies of the determination of the home state agency and accrediting body. . . . There are numerous issues and barriers to implementing this proposed strategy. In truth, it suggests a reciprocal arrangement between and among state agencies and accrediting bodies which has not occurred previously (Chaloux 1985, 55-56).

In truth, such reciprocity has not occurred since 1985 either, for two main reasons. One, having to do with states' fears of seeming to turn over responsibility for legally mandated determinations to other states, I will discuss in the next section of this paper. The other is that the expected increase in interstate telecommunications course delivery, or at least that portion of it brought to the attention of approval agencies, did not materialize at the rate expected. In this sense, Project ALLTEL was an effort strikingly ahead of its time.

Nevertheless, telecommunications higher education has clearly grown since the release of the ALLTEL report in 1985, with more on the way. Many states and accreditors now seem ready to reach a new consensus on their roles in the development of distance higher education nationally. In order to understand the terms and implications of this evolving consensus, one must have a feel for why and how states, in particular, regulate distance delivery of education, and the difficulties regulation poses for colleges and universities.

Why States Regulate Distance Higher Education Delivered via Telecommunications

All states have statutes that require some level of state licensure for institutions of higher education to operate within their jurisdictions. The procedures for achieving such authorization range from filing straightforward information on the purpose and control of a new educational corporation, along with the payment of a modest fee, to elaborate, time-consuming, and costly evaluations of academic quality and compatibility with statewide higher education planning concerns. Regardless of this immense variability in the strength of state laws, accrediting associations require legal authorization by the home state prior to considering a college or its programs for accreditation. Telecommunications brings considerable uncertainty to the question of whether an institution can be said to be operating in a state within the meaning of that state's relevant laws and regulations. It is nonetheless true that each state functions as the initial gatekeeper, the *sine qua non*, of higher education operations within its borders. Because states play this sequentially primary part in the expansion of telecommunications instruction nationally, this paper focuses on issues of state oversight.

The authority of the states to regulate education is based on the historical interpretation of the Tenth Amendment to the U.S. Constitution, commonly known as the Reserved Powers Clause. It declares: "The powers not delegated to the United States by the Constitution nor prohibited by it to the states are reserved to the states respectively or to the people." The Reserved Powers Clause has been construed to give control over education to the states. The federal government has largely adhered to this principle, with one result the lack of any national postsecondary education system of a kind found in most other countries. The legal complications of interstate telecommunications instruction -- including possible conflicts between states' rights to control education and the Constitutional prohibition against their regulating interstate commerce, potential First Amendment constraints, and issues of equal protection, restraint of trade, civil rights, and the determination of physical presence of an institution in a state -- are rampant (Chaloux 1985, 37-49).

Despite these complications, it is safe to assume that states will generally want to assert their authority over college credit telecommunications coursework from out of state being offered in the state. Most legally autonomous jurisdictions, after all, jealously guard their exercise of authority in their own jurisdictions. There are several more specific reasons that states often turn surly when approached by an out-of-state college about delivering courses by means of telecommunications into their territory. State agencies may see themselves as defending their investment in public colleges and universities, and perhaps in their independent institutions, against the barbarians, defined as in ancient Greece to include all "foreigners," but especially those who come bearing no libraries, classrooms, or laboratories. States may want to make the point that they are unwilling to relinquish to another state, or to a voluntary membership accrediting association, or to the federal government, the state's right and prerogative to decide what happens in its traditional preserve of education. Although these explanations for state behavior may be understandable in terms of *realpolitik*, each is fundamentally rooted in a knee-jerk, turf-protection instinct.

The other chief reason for states' enforcing approval processes for out-of-state colleges is more defensible: consumer protection. States do have a legitimate interest, and an obligation, to see that their citizens are not educationally defrauded, or conned into accepting inferior education when a superior variety is equally available. You might ask why states cannot simply accept regional accreditation as sufficient evidence that an out-of-state institution operates with integrity and academic quality. Turf protection aside, there are at least two substantive responses to this question. First, it is often difficult, if not impossible, for a regional accrediting group to ensure the quality of courses delivered on the ground thousands of miles away from its region. Moreover, the courses may be administered by one unit of a large institution the accreditor visits at the institution's main campus for two or three days once every ten years, so that they may not draw much attention during these brief and infrequent accreditation visits. Second, state agencies need to have at hand strong laws, regulations, and procedures that permit them to bar the unsavory practitioners in higher education, and courts tend to drive states to apply these evenhandedly, regardless of an institution's private, voluntary accreditation status.

Those who doubt the existence of a host of disreputable operators fully prepared to enrich themselves by defrauding individual citizens and the society at large through the sale of academic credentials that represent no, or insufficient, accomplishment would do well to familiarize themselves with the work of Stewart and Spille (1988) on diploma mills. Unfortunately, such ne'er-do-wells often employ the language and forms of non-traditional higher education -- adult, experiential, and distance learning -- to ply their nefarious trade. Because of the easy corruptibility of the non-traditional higher education movement, including distance education, in the wrong hands, state agencies must be resourceful in implementing authorization regulations in a way that reflects what should be their purpose: to make it inviting for the quality distance education institutions to operate, and forbidding for the scoundrels. But in making it hard for those who would purvey phony academic credentials to establish themselves, states inevitably make it less easy for respectable colleges. State regulation in higher education, as in many other fields, is thus not unlike car insurance; drivers with admirable safety records get a break on their rates, but finally they still pay to protect themselves and everybody else against the dangerous drivers (Reilly 1991).

Even early in the 1980's, the Reagan era of deregulation, some observers were noting the increased pressures for this state higher education regulatory insurance. In a 1983 article entitled "Telecommunications and Higher Education: In Search of a Public Policy," Michael Goldstein wrote:

> In recent years, this regulatory framework has become more sophisticated as states have reacted to a number of influences supportive of a closer supervisory role.

> These influences include increased demands for public accountability and consumer protection, rationalization of the substantial commitment of increasingly scarce public funds required to deliver postsecondary education, and concern over the need to protect existing institutions from what some view as the depredations of entities that do not have to bear the same facility and resource burdens of domestic schools (Goldstein 1983, 79).

The influences Goldstein recognized in 1983 have grown ever more pervasive and insistent since. Given the prevailing public sentiment for reform of education at all levels, and the fiscal crises facing many states as we move into the 1990's, these pressures are unlikely to diminish in the near term. States' responses to these forces in their regulation of telecommunications higher education, however, have resulted in a bewildering patchwork of individual state proclamations of authority and regulatory requirements.

How States Regulate Distance Higher Education Delivered via Telecommunications

Many states have relied on the concept of "physical presence" to decide whether they have the right and need to regulate an institution's credit-bearing telecommunications coursework delivered into their territory. If a state determines that an institution is physically present in the state by virtue of its activities, then the institution will be required to seek appropriate authorization for those activities. Conversely, if the nature and level of its activities "within" the state are such that it cannot be said to be physically present there, none of the state's laws or regulations applies to it.

While this concept makes good common sense, there is no generally accepted agreement on its application. Furthermore, it is largely untested legally. As the Project ALLTEL Report noted in 1985:

> There is no clear legal definition of "physical presence" and a body of case law has not yet been created. If an institution simply sends an electronic signal across the border, it has no "physical presence" in the state. If, on the other hand, the institution augments its electronic delivery with a counseling and tutoring service in the

> state, it clearly has a "physical presence." The great variation between these extremes is still undefined (Chaloux 1985, 29).

Seven years later, the situation is not much more defined. Most states seem to have taken the position that interstate mail and telephone lines used in delivery of courses do not in themselves constitute physical presence, and cannot be subject to state regulation anyway because they involve interstate commerce protected from such regulation by the Commerce Clause of the U.S. Constitution. Interactive computer systems, unsupplemented by in-state contact between the student and a mentor or tutor, likely fall into the same category. But not every state accepts physical presence as the trip wire for its regulation. Among those that do, it is interpreted in widely different ways.

Current Georgia statute, for example, requires an out-of-state institution that offers to Georgians an educational program by correspondence alone, or by electronic signal alone, to seek approval. Oregon regulations rely upon the presence of "a representative of the school acting within the state" to trigger the need for authorization. Those responsible for administering the authorization rules in Oregon take this definition to include not only teachers, mentors, and group leaders, but also TV operators, practicum supervisors, and test proctors under contract to the school (Young 1990).

Virginia does not base the need for approval on the presence of an individual, but rather on the location of a site within the state:

> "Site" means a location in Virginia where an institution (i) offers one or more courses for degree credit on an established schedule and (ii) enrolls two or more persons who are not members of the same household (Virginia Regulation 380-02-01, S. 1.1 Definitions).

Thus in Virginia authorization is not required for correspondence study because it is not offered on an established schedule. Over-the-airwaves telecommunicated instruction of the "Sunrise Semester" variety, if received by one or more members of the same household, would not make the home a site under this regulation (Molnar 1990). Presumably, however, any location where two enrolled students not members of the same household receive such instruction would be considered a site for which approval would be necessary. So if your friend from next door joins you for Sunrise Semester, and you are both enrolled for credit, your house becomes an official Virginia site.

These examples of law, regulation, and their interpretation in three states demonstrate that it can be far from simple for an institution to judge whether it needs to pursue authorization when it crosses state lines. Once into the application phase, as I have already indicated, an institution may be asked to provide information ranging from minimal data to the equivalent of an accreditation self-study, depending upon the established process in any given state. The review of its activities may involve one state approving agency staff reading the application, or multi-site visits with teams of external consultants, evaluation reports requiring the college's response, and statewide planning canvasses of the reactions of in-state institutions to the application. The state politics that influence the final determination on the application can be as mysterious for the outsider institution as the mind of an automobile mechanic. From the institutional perspective, the complexity and cost of current state regulation present difficulties that can seem insurmountable even to the most civic-minded and quality-oriented college or university. In the face of these obstacles, it is little wonder that more distance education programs of national scope have not emerged.

Encouraging the Development of Interstate Distance Education While Assuring Quality

Recognizing all these difficulties and complications, New York Regents staff decided to try to address them in a way appropriate for the 1990's and beyond. After the Regents approved the National Technological University to operate in New York via telecommunications in 1991, staff organized a meeting on interstate cooperation in the review of distance education. IBM agreed to underwrite it. The meeting was by invitation only, for a nucleus of states with strong interest in the subject. Arizona, Colorado, Connecticut, Georgia, Illinois, Minnesota, New York, Pennsylvania, Tennessee, Texas, Vermont, Virginia, and the Commonwealth of Puerto Rico participated in the June 1991 conference, along with SHEEO, COPA, and IBM. New York's review and approval of NTU served as the case study for discussion.

As a result of this meeting, participants agreed to use the review of a distance learning institution in the institution's home state as part of the approval process in other states where the institution seeks to operate. Efforts are now being made to persuade the remaining states to sign on to the agreement. According to its terms, states would rely not only upon the home state review, but also upon additional reviews that may have been carried out by other states. Some states may choose to recommend approval to their boards based largely upon the careful and thorough review of another state. Other states may want to visit sites at which distance education is delivered within their borders, or ask for additional information and assurances. This new interstate agreement does not entail automatic reciprocity of recognition, thus avoiding the chief impediment to the implementation of Project ALLTEL -- states' instinctive political abhorrence of the Project's call for the acceptance by "receiving" states of the determination of the state of origin. With this new cooperative arrangement, each state retains the right to make its own individual decisions on applications to operate. It does commit states nonetheless to build upon the work of other states, and thereby minimize duplication in review processes.

One way to hold down this duplication is for states to agree to a common information collection instrument for distance education institutions seeking to operate in a number of states. New York and Virginia have already adopted a common form based on a prototype institutional profile drawn up by Project ALLTEL. It is being circulated to the other states for their consideration at the time of writing. Those of us who work at the state level would also like to have the reactions of distance educators to the form at this stage of its evolution. I am happy to make copies available to participants in George Mason's Tenth Annual Conference on Nontraditional/Interdisciplinary Programs, and would be pleased to hear from those who want to suggest revisions.

Let me introduce the information collection instrument in this paper with a very brief overview. The instrument requests responses from institutions in ten broad categories: (1) identification of programs and instructional locations, (2) institutional mission, (3) organization and administration, (4) finance, (5) programmatic information, (6) instructional staff, (7) student services, (8) learning resources and services, (9) telecommunications delivery systems, and (10) academic oversight. Specific questions are posed under each of these categories.

Under programmatic information, for instance, the college is asked to explain how its telecommunication program will compare with on-campus offerings, taking into consideration the difference in delivery methods, with particular attention to: (a) the nature and extent of contact with the instructor and other students; (b) access to libraries, labs, equipment, and other resources necessary to support study in the program; and (c) the methods by which students will be evaluated. One of the items in the telecommunications delivery systems section of the form calls for a description of any equipment to which students must have access in order to receive instruction and interact appropriately with the instructor, as well as arrangements for making this equipment available to students. The institution also needs to provide data on the ideal and actual ratios of equipment to numbers of students using it. I hope you sense from these examples that the questions are intended to give the applicant institution the opportunity to demonstrate the quality and integrity of its distance program.

If with the advice of those of you who are distance education practitioners or administrators a significant number of states can agree to share a version of this instrument and cooperate in the review of telecommunications-delivered programs, we will attempt to broaden the consensus beyond state capitals. Further steps include approaching the voluntary accreditation bodies to determine their willingness to employ such an information collection form, urging the regional accrediting associations to establish and expand inter-regional recognition agreements on coursework delivered via telecommunications, and exploring the accreditors' reaction to using more fully states' approval of distance education programs for accreditation purposes.

But first, states must accelerate their movement toward acting more like units of a nation and less like sovereign entities in their regulation of interstate distance higher education via telecommunications. The initiatives I have described should help encourage this movement. If it takes hold, states and institutions will be off to a strong start in shaping a national policy that encourages the development of quality distance higher education for ever greater numbers of our citizens with the appropriate consumer safeguards.

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SUNY BY SATELLITE:
A NEW MODEL FOR HIGHER EDUCATION

Lowell Hurlbut Roberts
Carol A. Twigg

As budgets become increasingly tight, daytime, campus-based higher education becomes increasingly costly and inaccessible to many students. Traditional pedagogies are less and less likely to serve the circumstances and needs of students. This paper presents a model of the future mainstream of higher education, one that integrates existing campus facilities and curricula with telecommunications technologies, intercampus cooperation, and individualized degree programs.

So, here we are at George Mason University's Conference on The Future of Nontraditional/Interdisciplinary Programs: Margin or Mainstream, seeking ideas and insights about how to make higher education accessible to everyone who has the motivation and capacity to pursue undergraduate study. Academically and financially, this is not a marginal issue. Ethically, it is at the heart of the mission of American higher education. The question, then, is how do we move the activities of the university that exist at the nation's social, cultural and economic margins to the American mainstream? How do we, for example, turn a 10:00 am lecture in Old Main, an activity available to a tiny minority of potential learners, into a mainstream learning opportunity, available to any qualified student?

The Problem: Inadequate Access

Expanding access to higher education is usually addressed through flexible admissions, creative financial assistance, enhanced student support and remedial

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services, campus space utilization at night or on weekends, and by sending faculty and adjuncts off campus. Increasingly, however, limited -- and even diminishing -- institutional resources and capacity are forcing colleges and universities to rethink how accessible they can be. It is hard to keep sending faculty to storefronts if a whole department must be sacrificed. As institutions are forced to diminish their instructional and support capacities, the traditional structures of higher education may not be able to accommodate all deserving students.

The State University of New York (SUNY) is acutely aware of this problem. Due to limited space at SUNY colleges and universities, many graduates of SUNY two-year institutions have historically been denied the opportunity to continue study toward the bachelor's degree, at least at public colleges. This has been particularly true for students in professional programs such as business. In addition, campus-based study is geographically out of reach for many students who cannot live on campus -- e.g., rural students without substantial financial support and working or caregiving adults.

The current New York State fiscal situation may exacerbate these problems if budget reductions force SUNY institutions to make significant cuts in instructional and support personnel, as well as off-campus programs. Thus, spaces for transferring degree candidates may be reduced even further. In addition, tuition increases (SUNY tuition increased 60% in 1991 for baccalaureate students) may make full-time and daytime study difficult for more and more students, since wage-earning may become a primary means to finance college for traditional age, as well as adult, students.

Diminishing resources, increasing costs may be all too familiar to many in higher education. But we must also recognize that the social responsibility of colleges and universities to prepare the workforce, leadership, and thinkers necessary for the survival of the nation does not diminish. If anything, in economic and cultural crises, that responsibility is heightened. This does not simply imply doing more with less, although perhaps that must be done. It also means being more effective in the ways we structure learning and teaching. Students do not all learn in the same way, nor is all material best taught in the same way. Approaches that combine structure and independence, class and individualization, core and flexible curricula, and structured and flexible time can complement traditional and less diversified approaches, thereby more effectively meeting the needs and cognitive capacities of heretofore under-served students. Being more effective will permit higher education to make more efficient use of its resources and funds.

The Solution: SUNY By Satellite

SUNY is a statewide institution of enormous resources. Unfortunately, as is the case in many states, the distribution of resources is not always well suited to the distribution of needs. For example, thirteen arts and sciences colleges can accept fewer than half the qualified business students that seek transfer from thirty-eight two-year colleges. Clearly, SUNY has to find a way to address such unmet needs without increasing university-wide expenditures and by taking advantage of its existing resources.

Telecommunications technologies, supported by inter-campus cooperation, may provide the solution.

SUNY's Chancellor has asked SUNY Empire State College (ESC) to develop innovative applications of educational technology to help the University achieve its objectives of access, program quality, and cost effectiveness. Using existing campus and telecommunications resources, ESC will offer a baccalaureate degree program with a concentration in business administration. The College will deliver the core courses in the major by satellite and electronic communications systems. Students will complete the balance of their programs via other distance modalities and/or local classroom or individualized studies.

Our goal is to develop a replicable pedagogical and delivery model that meets student needs (economic, social, curricular, and learning) and demonstrates the effectiveness, both academic and financial, of technology-based educational programming. The SUNY by Satellite (SBS) model will have significant advantages for many students, as well as for the administration and delivery of baccalaureate education throughout the SUNY system:

- Students will be able to complete their educations locally, with no greater commute than to their community college;

- Students will be provided an alternative to both campus-based and independent degree programs, thereby removing remaining barriers to access and increasing the flexibility and openness of SUNY's educational opportunities;

- Access to college will be increased without capital expenditure since sites, telecommunications networks, and major hardware are already in place;

- Access to good teachers and teaching and to learning resources will be enhanced, while facility costs will be reduced;
- SUNY programs and institutions will be integrated and articulated to an unprecedented degree, particularly 2-year and 4-year programs, 2-year institutions and a SUNY baccalaureate institution, and degree programs and support services (e.g., libraries; television and computer networks).

In short, this model, using existing facilities and communication networks, will greatly expand access to higher education for every resident of New York State. Economies of scale, achieved through a single point of instruction, multiple points of learning delivery system, are expected to increase the comparative cost-effectiveness of this model.

Key Elements of SBS

Single point of instruction

Instruction will be delivered live via SUNYSAT, SUNY's state-of-the-art satellite television communications system, which links all 64 SUNY campuses. Originating from the SUNYSAT/New York Network studio in Albany, telecasts will use the widest range of instructional techniques, including lectures, guests, panels, student collaboration, videos, computer graphics, even chalk boards. Each course will be developed and delivered by accomplished teachers. Faculty are being recruited from SUNY institutions and from New York's independent colleges and universities. To provide maximum flexibility for students, the courses will be videotaped and made available for review throughout the term.

Multiple points of learning

Students will receive the courses, via SUNYSAT downlinks, at the State's community colleges and two-year colleges of technology. During the 1992-93 academic year, a maximum of nine of these 36 institutions will serve as pilot sites. Empire State College will handle all academic and program administration and, in concert with the New York Network, manage course delivery. Local colleges will provide appropriate classroom space and downlink services, as well as support services and facilities, such as libraries and computer laboratories. Students will participate in the courses on a live, interactive basis, but videotapes of each class will also be available. After the pilot year, other two-year college sites will be added to the network. Later, additional sites with fixed SUNYSAT dishes or flexible downlinks capable of receiving SUNYSAT transmissions (e.g., town libraries) may be added.

Teacher-student interaction

During class, each receive site will be connected to the studio by SUNYNet, SUNY's high-speed campus-to-campus computer network and by telephone. During the lecture, students will be able to interact directly with the lecturer over the telephone. At other times, students will be able to ask questions or make comments using a local computer. These questions and comments will be batched at the studio, and the instructor will respond to them at appropriate moments in the class. Receive sites can also be connected through SUNYNet to promote interaction among students in different locations.

Student support and evaluation

Each receive site will have an academic advisor/coordinator who, in addition to setting up and monitoring classes, will provide local orientation, enrollment, advisory, and technical support services. Working under the supervision of the telecourse lecturer, course assistants will evaluate student work and be available to provide tutorial support to students by telephone, electronic mail, and computer conference. Building on ESC's successful use of computer conferencing to promote peer interaction among distance students, opportunities for participation in informal intellectual discussion and extracurricular activities will be available to students through SUNYNet.

Learning resources

Sale and distribution of course materials (e.g., texts, workbooks, software) will be handled by the ESC Distribution Center and Bookstore. The libraries of the receive site colleges will be available to the students, and through the ESC Library Access Program (LAP), students will also have access to other academic libraries statewide. In addition, access to local college academic support services, such as writing and computer centers, will be negotiated for those students who may require them.

The curriculum

Students will be expected to enter the program after earning an associate's degree, ordinarily in business. That degree should include credit applicable to the business administration major and would likely include course work outside the major but complementary to or supportive of it. Specific articulation agreements are being developed with the two-year institutions to facilitate transfer and inform advisement at the associate's degree level.

Building on the transfer of 64 credits from the Associates degree, the baccalaureate will require 128 credits. The concentration will be available to students as an integrated set of eight 4-credit telecourses. Not only will the major curriculum be internally consistent and complementary, but in developing the courses, emphasis is being placed on building upon the knowledge and skills the students will bring with them from their associate's degree programs. To insure flexibility, however, students will have the option of completing the core requirements through equivalent study options. That is, students will not need to take a telecourse if an alternative, such as transfer of prior course credit or enrollment in a distance learning or classroom course, is available or preferred.

In consultation with advisory groups from SUNY four-year and two-year business departments, the ESC Business Curriculum Advisory Panel has recommended that the following areas of business studies form the major concentration of 8 upper-level courses delivered via SUNYSAT:

Money and banking
Corporate finance
Business ethics
Business policy
Marketing management
International business
Organizational behavior
Quantitative methods

The actual courses are being developed by the lecturers, subject to the oversight of the Curriculum Advisory Panel and the project's academic co-coordinator. Two courses will be telecast simultaneously on Tuesday and Thursday nights, thereby minimizing transponder costs and use of local campus facilities. This will also permit students to complete the major in two years.

Students will complete their elective credits in the major and in the liberal arts and sciences through pre-approved cross registration at other SUNY institutions, at independent colleges and universities, through Empire State College's distance learning program, and/or by learning contracts at any of ESC's 40 locations in New York State. They may also meet requirements through standard means for documenting college learning, such as CLEP examinations.

Academic advisement will focus on developing a coherent curriculum for each student from diverse sources best suited to the individual student's needs and circumstances. The students, assisted by local academic advisors, will draw on an array of new and existing resources, including computerized aids which are being developed to support the program. These advisement aids will include computerized transcript analyses and degree program audits, national distance learning data bases, and print and video materials.

The Future of SBS

The combination of a fixed major curriculum, delivered primarily by satellite, and an open-ended elective curriculum, available through a variety of delivery options, rationalized through individual advisement and approved degree programs, will provide students an affordable path to a baccalaureate of unprecedented flexibility.

But it is important to keep in mind that this initiative is not being invented from whole cloth. Rather, it is a synthesis of existing delivery models and existing resources. Institutions have already demonstrated the educational efficacy of interactive television (e.g., the Community College of Maine and Northern Virginia Community College) and computer mediated communication (e.g., SUNY Empire State College and California State University, Los Angeles). The State University of New York already had the resources -- teachers, facilities, telecommunications systems -- albeit not generally available to meet the needs of a large proportion of potential business students.

The SUNY by Satellite initiative brings these together into a new model of upper-level academic programming that is affordable to the State and the students. It is also a delivery model that meets the circumstances and needs of a significantly underserved population of potential students, whose skills and knowledge are needed for the State's economic recovery and competitive survival. We are convinced that the model, once demonstrated, can be affordably replicated by other institutions, other state systems of higher education, and for other academic degree programs.

The bird flies this fall. We'll be back next spring to tell you how far it soared.

MANAGING INFORMATION FOR MULTIPURPOSE ASSESSMENT

Richard A. Schalinske
Richard M. Ashbrook
Robert A. Patterson
Gary L. Smith

This paper offers an example of an efficient and affordable strategy for managing assessment information on college campuses. This strategy, developed at Capital University over the past five years, relies on a clearly conceived conceptual model of assessment. Just as higher education has delineated the role of assessment over the last few years, the Capital University faculty pioneered a new competency based core curriculum that strengthened their focus on learning outcomes. At the same time and in anticipation of a regional accreditation site visit, the university began an intensive program review. In these efforts the assessment model became integral for framing the relevant questions. In turn we were challenged to develop an information management approach that could keep pace with assessment needs.

Introduction

Institutions of higher education, however large or small, have recognized the benefits of assessment. Although academic program improvement and greater educational accountability are direct benefits of assessment, university projects

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involving recruitment, program planning, and minority access can also profit from outcome-based research. Other tangible benefits include translation of assessment results into curriculum redesign, development of new classroom techniques (e.g. practitioner research) and alliances with business and industry to assure relevant college outcomes. There seems little doubt that assessment is worthwhile. The question is whether colleges can afford it?

While different constituencies demand different types of assessment data, a globally conceived assessment model can serve virtually all constituencies by delineating the field of questions that might be asked. User-friendly assessment databases permit constituencies to efficiently extract and utilize the assessment data. There are two necessary ingredients for such an assessment system to work. One, there must be a fairly complete model of assessment, and two, there needs to be an information management technology that permits questions to be easily researched.

The Assessment Model

While there is not sufficient space to explain the model of assessment that guided the Capital University project, the reader is referred to Figure 1 which shows the types of questions generated at each level of the model.

Information Management

The benefits of a multi-purpose informational management system are not dependent upon smoke and mirrors. Instead the concept is premised upon a short-term investment that can yield long-term results. In the short term, an assessment process must first be clearly seen as the practical expression of a well-conceived assessment model. Using such a model, the process must then be defined in terms of constituencies and their administrative needs. For many universities these areas are testing, waiver/transfer evaluation, prior/experiential learning evaluation, research, and reporting. At this point the specific logistical demands for the collection, organization, tabulation, and dissemination of information from each of the constituencies can be incorporated into the process as informational database procedures. Once the demands of each area are delineated and commonalities discerned, the long-term benefits of a multi-purpose process can be fully realized.

Capital University has developed a multi-purpose information system for administrative support of the University Assessment Center and the University Competency Assessment Panel (UCAP). The subsequent system represents: 1) the practical expression of a coherent assessment model; 2) the careful delineation of present and anticipated administrative needs; and 3) the creation and relentless refinement of a versatile database program.

When assessment became an integral part of Capital's learning environment, there was an administrative need for a more formalized reporting of assessment activities, particularly in the determination of course waivers or the awarding of credit for experiential learning. The University determined that the student, student's advisor and the registrar were, at minimum, the persons who needed to be informed when actions were taken either by the University Assessment Center (UAC) or the University Competency Assessment Panel (UCAP). Ideally, reports would be generated soon after the action was taken and distributed to the appropriate persons, so that upon receipt of the reports, the registrar could promptly note the actions as a permanent entry on the student's academic record.

It was also determined that individual and group summary data should be provided to the undergraduate colleges, departments and Adult Degree Program centers. Assessment results are communicated to specific faculty committees and administrative departments. This information can then become part of the program review process.

Finally, it was determined that assessment activities would have to be tracked over a period or periods of time so that the University could "see" trends in the outcomes of assessment actions and begin the process of evaluating the validity of the process. Statistics reflecting such outcomes as the percentage of credits granted and the mean number of courses submitted by students were seen as particularly valuable. Additionally, this ability would provide some assurance to students that credit and/or course waivers were indeed being granted. In other words, reporting would have to enhance communication and the assessment process itself.

Creating The Versatile Database

An electronic database is analogous to a manual filing system. That is, the entire database is the equivalent of a filing cabinet, where each record is the equivalent of a file folder, and each part of the record is the equivalent of paper in the folder. In both systems, records or parts of records can be coded for cross filing and reporting purposes. The main difference between the two, however, is that once information has been "loaded" into an electronic database, the cross filing and reports are essentially already completed. Sorts, tabulations, calculations, and even form letters are readily available. Similarly records can be updated, deleted, or sorted on the basis of dates or other criteria. Whereas a manual filing system requires a great deal of effort to merely maintain information for processing, an electronic database can maintain and process information immediately after it has been entered. The difference in efficiency between these two filing systems can easily be translated into financial differences for institutions that depend on information.

All electronic databases are not created equally. Some databases limit the amount of information that can be entered onto a record, the number of crossfiling options, or the types of reports that can be generated. Other databases require a great deal of user instruction since knowledge of programming may be required to complete simple database tasks like inputting and reporting information. Finally, even the most sophisticated database can be limited by a structure that is intentionally designed to serve only one purpose. In this all too common situation, separate databases, and hence sperate inputting efforts, are needed to do what one well-designed database could do. The end result is added expenses and inefficient information storage.

The assessment database was initially designed to take advantage of a sophisticated computer program and be flexible enough to support both predetermined and even many unanticipated Assessment related procedures. Using DataPerfect, separate record panels could be linked together in a variety of ways, depending upon the way information processing was desired. Such a linkage allowed for the addition of new record panels for later revision without altering the original structure.

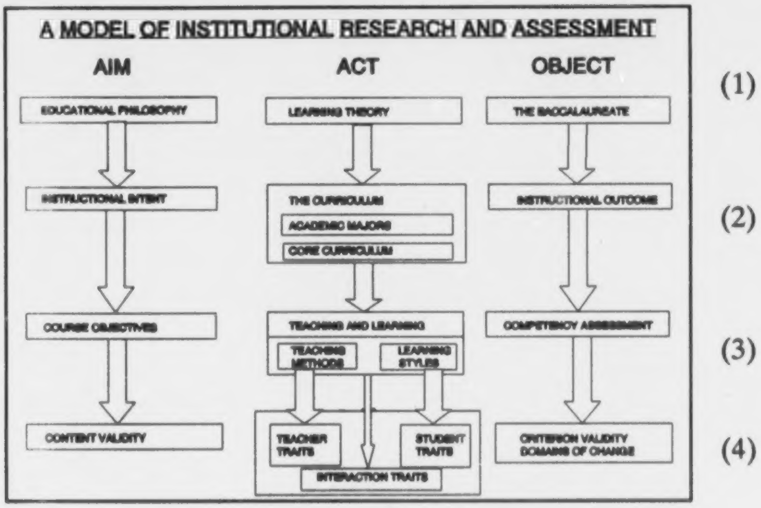
Essentially the structure was based upon a STUDENT panel that included demographic data about each student. Linked to this panel could be any number of COURSE panels which included relevant information about each request for credit including, Course Title/Model, number of hours requested, date of submission etc. Since information could be electronically linked from the STUDENT panel to the COURSE panel, new COURSE panels could be added for existing students without entering new demographic data. From each COURSE panel was linked a SUMMARY panel on which the preliminary comments of the Assessment Panel could be recorded. Also from each COURSE panel was linked an ACTION panel where the vote, decision, and official comments of the Assessment Panel could be recorded. Reports were formatted to use data from all of the panels so that summaries could be generated by course, student, and/or program and form letters could be issued immediately after data entry. In later versions of the database, programmed statistical summaries were added to all applicable reports.

Taking advantage of another DataPerfect feature, the database was designed to be extremely user friendly. For each field a help message was programmed to automatically appear on top of the screen to alert the operator as to what type of data should be entered. In addition, all link icons were described with similar messages. Thus moving through the database, an operator would have constant reminders about what codes to use or how the various panels were linked. By incorporating such automatic help features, operator errors could be minimized and database procedure accuracy improved.

While the database was originally designed to be used as a free-standing information management system, it was assumed that data would also have to be transferable to other database structures and/or a campus mainframe environment. The DataPerfect program allowed for the conversion of all files to an ASCII or flat file so that the data could be transferred to new structures (e.g. dBase IV) or environments via disk, modem, or smart terminal. Such a conversion process would also allow for the downloading of information. In this manner the database could be both a free standing system and an intermediate management system for the support of a larger campus database.

Version 3.4 is a complete database for IBM/PC's programmed in WordPerfect Corporation's DataPerfect 1.0 or 2.0. The database consists of separate files for each panel (NAME), the index of all panels (.IND), the structure of all panels, indexes, settings, and reports (.STR), and all text field data (.TXX). DataPerfect is a registered trademark of: WordPerfect Corporation, 1555 N. Technology Way, Orem, Utah 84057.

Figure 1 The Assessment Model


A MODEL OF INSTITUTIONAL RESEARCH AND ASSESSMENT
AIM
ACT
OBJECT
EDUCATIONAL PHILOSOPHY
LEARNING THEORY
THE BACCALAUREATE
INSTRUCTIONAL INTENT
THE CURRICULUM
ACADEMIC MAJORS
CORE CURRICULUM
INSTRUCTIONAL OUTCOME
COURSE OBJECTIVES
TEACHING AND LEARNING
TEACHING METHODS
LEARNING STYLES
COMPETENCY ASSESSMENT
CONTENT VALIDITY
TEACHER TRAITS
STUDENT TRAITS
INTERACTION TRAITS
CRITERION VALIDITY
DOMAINS OF CHANGE
(1)
(2)
(3)
(4)

1) What is liberal arts education?
How does learning occur?
What is the baccalaureate degree?

2) What curriculum will fulfill the instructional intent?
What should constitute a core curriculum?
What outcomes are expected from the curriculum?

3) How can instructional intents be operationalized into course objectives?
How can academic competency be assessed?
What are ways to promote learning?

4) Are core objectives true to the instructional intent?
Is the curriculum effective?
What characteristics of teachers and students predict attainment of competency?
What teaching methods are effective?
What are the domains of educational change?
How do variables interact to influence learning? For which student characteristics is the curriculum effective?

Appendix

Student Report Form

Competency Evaluation Report
University Competency Assessment Panel
Capital University
2199 East Main Street
Columbus, Ohio 43209
(614) 236-6374

05/03/92

Blanchard, Donald
4751 Coulson Drive
Dayton, Ohio 4518

ID/SS: 223-24-2888
Telephone: (513) 262-2222

U.C.A.P. Action (X)
Transfer Evaluation ( )
Misc. ( )

Course Model: Systems Analysis

1)

Credit Requested:	3	Credit Granted:	3
Level Requested:	I	Level Granted:	I
Core Requested:	N	Core Granted:	N
Department:	Computer Science		

Comments:

2) Credit granted upon resubmission:
Level:
Core:

Comments:

3) * TOTAL CREDIT AWARD: 3
Date(s) of Action: 03/06/91

Richard M. Ashbrook, Ph.D.

cc: Program: ADP, Dayton
Advisor: Ghavami
Registrar

AN E-MAIL COURSE ON COMPUTER ARCHITECTURE: A FIRST ASSESSMENT

Daniele C. Struppa
Stanley M. Zoltek

In this paper we describe an experimental course on computer architecture which we have implemented at George Mason University, and which is directed from a remote site in Italy. The course, which is non-credit because of its experimental nature, is being offered from February to May, but some preliminary assessments can currently be made and some partial evaluation is possible. While some aspects of the course have been quite successful, there are certainly many lessons to be learned and we expect to test our understanding of these lessons in a follow-up to be offered at the University of Calabria in Italy, but to be directed from George Mason University.

Introduction

In this paper we describe an experimental e-mail course on computer architecture. We are currently offering this course at George Mason University and directing it from a remote site at the University of Lecce, in Southern Italy. It is being run as a test of the educational capabilities of the electronic mail system, and as a test of how students seem to receive such a kind of nonstandard instruction. We are also testing whether specific materials must be developed for such a course or whether the course can function successfully using a standard textbook. In this course we are using a standard textbook as the primary means of delivering course content, and electronic communication as the way to stimulate student discussion and interaction. [The second author is currently conducting a distance learning course that employs notes specifically written for the distance learning environment and

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uses a text only to supplement the notes. See (2) for more details]. The value of distance learning techniques is discussed in (2), (4) and will not be elaborated on here.

In section two we describe the course and its implementation: the contents of the course, the materials and the media we are using, the methodology being employed, the technical details and the difficulties which have arisen. In section three we comment on the student reception of the course. We analyze the effect that the specific method of student recruitment has had on the pace of the course and on the levels of student interaction. We also discuss the effects that technical difficulties have had on student enthusiasm and make specific recommendations on how to organize such a course in the future.

The last section is perhaps the most important because in it we outline which lessons we think we have learned from this experience (even though more details will be available at the time of the presentation of this paper); in particular, we are now in the process of finalizing the administrative details to implement a similar course that will make use of what we have learned from the current experiment.

In the Spring of 1993, we plan to offer a non-credit course by e-mail to the students of the University of Calabria in Southern Italy. This course will be directed from George Mason University. We will take advantage of the first author being on leave to the university in Italy to experiment with a mathematics course which is now being prepared by the second author, and which will cover the topic of real analysis. An implementation of the course that will allow credit to be given is also being considered and will be discussed in the near future.

More specifically, we will single out a small number of English reading students from a real analysis class at the College of Engineering of the University of Calabria. These students (all volunteers, of course) will not attend regular classes but instead will work with a text and materials prepared by the authors. (See section four for more discussion on the need for specially prepared materials.) They will be provided with on-line assistance when needed. We expect to set up a network support system among the students and the two instructors who will be mediating the course. The remaining students will be provided with a "normal" classroom environment. Since both groups will be covering the same material, we will be able to do a comparative study between the groups.

The course that we describe in this paper has been in preparation for quite a while now, and the course design and implementation plan have been accepted for publication in the Proceedings of ICCAL 1992 [See (3)]. While that paper presents the pedagogical plans of the authors, the present paper reflects the "reality" of what has been accomplished and comments on what does and does not work. Together, the papers can be of use when making forecasts in the rather fluid field of computer mediated education.

The authors are very grateful to Professors M. De Blasi and A. Gentile, who are coordinating the course from Italy, as well as to George Mason University which has made the course possible through the full use of its equipment. Our warmest thanks, however, go to our students who have accepted this rather unpleasant role of "guinea pigs"; we hope they have learned from this course at least as much as we have, and we apologize to them if the experimental nature of the course has sometimes imposed some hardships on them.

The Course and its Implementation

We chose Computer Architecture as the topic for our experiment in distance learning for several reasons. Since a similar e-mail course had already been experimented with (albeit in a very local situation) at the University of Bari by Prof. M. De Blasi [See (2)], we had a foundation of experience that could be built upon. Also we were looking for a topic in a technical field that would not require the transmission of many technical symbols and formulas. At present there are a number of difficulties with sending complicated formulas through e-mail. The major reason is that the mail messages containing formulas do not read easily "on-line." Although it is possible to transmit such information via e-mail, reading the material requires software implementations that are not easily available to most students, especially if they are logging in from off campus.

Let us briefly describe how the course has been organized. A preliminary session of two hours was conducted on Saturday, February 8. On this occasion, the second author held an extensive introduction to the electronic means of communication that would be employed (at least those means directly available to us at George Mason University). The workshop covered the use of electronic mail and NEWS on a VAX computer. Specifically, we covered VAX/VMS mail and NEWS utilities. The 25 students participating in this first session were provided free of charge with a DOS-based diskette with a tutorial developed by the second author [see (5)] that teaches the use of VAX e-mail, VAX NEWS; and the management of files, including the uploading and downloading of files. The use of an on-line bulletin board system, VAX NEWS, was also explained.

On the above-mentioned diskette, the students also had access to a self-paced tutorial on VAX NEWS. This diskette has proved to be quite successful, and we are planning to use it also in connection with the experimental course to be given in Italy.

This first meeting was held in a lecture hall specially equipped with an electronic projection system that allowed us to display an actual "on-line" demonstration of e-mail. (After the demonstration, a smaller group of students who felt they needed more detailed instruction on the use of e-mail and VAX NEWS went to the computer laboratory of the Center for the Applications of Mathematics to practice their newly learned skills.)

At this first class meeting the students were also asked to complete an entrance questionnaire, designed to provide some background information on the students such as their major, previous exposure to electronic communication, computer mediated education and what they already knew about computer architecture. The detailed results of these questionnaires are available upon request at the Center for the Applications of Mathematics. (Some discussion on the results will be given later in this paper.) The students were then given two weeks to familiarize themselves with the use of e-mail and the NEWS facility before the second face-to-face meeting which took place on Saturday, February 22.

It can now be said that the interval we let elapse between these two meeting was certainly longer than we should have allowed for, and this factor undermined the interest in the course for at least a few of those students who already had a good working knowledge of the mail system. We should have more carefully profited from the entrance questionnaire, which showed that, on the average, a good knowledge of the mail system was present.

In the second meeting, the first author gave a two-hour presentation of the course and of the book which was going to be the textbook for the course. An overview of the material to be covered was presented. The topics listed were: The Hierarchical Organization of Computing Systems, Information Representation, Instruction Format, Data Types and Instructions, Flow of Control Modifications, Operating System Support, Concurrency in Computers, Parallel Architectures. This material was to be made available to the students from the text, Computer Architecture, by M. De Blasi [See (1)].

The initial presentation was, we believe, fairly well received, and a rather long and exhaustive discussion ensued after the presentation. At this point, the students were ready to receive directions by e-mail and over a specially set up newsgroup. They received a mail message telling them to read chapter one in the text and then to respond to the first set of questions that had been posted to the newsgroup.

A set of two to four questions are being assigned three times a week. At first, the questions were posted locally to our special bulletin board here at George Mason University. Additional questions are being posted on the "bulletin board system" in Italy. In this respect, we should say that a set of about 50 questions has been prepared for each chapter, so that the person in charge of the course can choose which questions to use, depending on the level of knowledge displayed by the students.

The posted questions are being provided in a multiple choice format. However, these questions (prepared by De Blasi and Gentile) are not really as clear-cut as they first appear. The students are asked to respond to the questions by selecting the correct choice or choices. The idea is to have what appears to be a list of simple multiple choice questions. Upon closer scrutiny, however, one discovers that they are not the usual multiple choice questions, since often many answers can be considered correct answers, or perhaps none of them is correct. This approach, of course, rules out any possibility of automatic correction but, on the other hand, makes the whole process of answering questions much more interesting and educationally significant.

Posting both the questions and the answers to the newsgroup brings about a lively discussion as students participate in critiquing each other's work. This results in a rather creative interaction taking place. The role of the coordinators of the course (the authors in the US, and De Blasi and Gentile in Italy) is reduced to that of discussion moderators. Complete (anonymous) records of the discussion have been kept, and they are accessible for study at the Center for the Applications of Mathematics. However, it may be of some interest to quote at least one of these exchanges, which exemplifies the rather active and interesting turn that the course took at this point.

Below is a sample exchange between students. Note that this exchange was readable by the entire class and anyone who wanted to could and did add their comments. The bulletin board system (VAX NEWS) uses the symbol ">" to distinguish one students comments from another's.

From: 5999ah@gmuvax.gmu.edu Newsgroups: gmu.math999
Subject: Re: Question # 1
Message-ID: <1992Mar18.145519.51993@gmuvax.gmu.edu>

Date: 18 Mar 92 14:55:19 -0500
References: <1992Mar17.030304.51975@gmuvax.gmu.edu>
Organization: George Mason University, Fairfax, VA.
Lines: 33

In article <1992Mar18.093646.51986@gmuvax.gmu.edu>,
5999at@gmuvax.gmu.edu writes:
>
> In article <1992Mar17.030304.51975@gmuvax.gmu.edu>,
> 5999inst@gmuvax.gmu.edu writes:
>> For the question below is the answer (a) or (b) or something else (c)?
>>
>> 1. The notion of virtual machine is introduced :
>>   a) to provide a more effective problem representation,
>>   b) to provide a more efficient problem representation,
>>   c) ---
>>
>
> I believe the answer to this question is a. The notion of
> virtual machine is to make it easier to use. If it easier to use, it is
> more effective because it is easier to apply to a problem. The most powerful
> tool is ineffective if it is not used. How can it make it more efficient?
> True, compiled programs are almost machine code, but they aren't quite there.

I would agree with this if the answers referred to implementation of solutions, but they refer to problem representation. All problem representations that offer the same solutions are equally effective regardless of their form; they are not, however, equally efficient.

We are really saying the same thing in our answers, but I think we are answering different questions.

End of Example.

What is interesting about the above exchange is the polite, but precise way in which one student explains why he or she feels the other student's answer is not quite correct. At this point, unfortunately, the number of faithful students had dwindled to only 10, which reflects some of our mistakes; for one thing, too much time had elapsed between the first and the second meeting, and, even after the second meeting, international communications had not yet begun, due to problems with the local network in Lecce.

One non-marginal aspect, which has to be taken into very serious account, is of course the fact that the course is not being offered for credit. It is our own personal experience that it is very difficult to keep working when the only motivation is an inner one, and no external pressure is in effect. This fact, unfortunately, holds true even for mature students, such as ourselves, and it certainly has a major impact on younger students who, as it was in this case, are also faced by strict deadlines in their other standard course load.

We are currently realizing the international flavor of the course by subscribing the remaining students to three BITNET lists based in Bari. The three lists are private lists (in the sense that the access is restricted and operated by the list owners, in this case De Blasi and the first author), whose names are: CLASSROOM, BBOARD, LIBRARY, all of which are served by LISTSERV@IBACSATA. The discussion which first took place in the newsgroup we had set up will become international. It also will be more varied in the sense that while the CLASSROOM list is to be used for the exchange of rather intense discussion during the development of the course, the BBOARD (blackboard, of course) is to be used for addenda to the instruction delivered from the book, and LIBRARY, finally, is to be used as a container for those class exchanges of special interest and important information from the course coordinators, to be archived in a more permanent fashion for later referral.

We are unfortunately unable to comment on the use of these BITNET lists at this moment, since they will not be fully implemented until the first week of April. We hope at that point an exciting element will be added to the course by the international flavor of the communications. We will also be adding some face-to-face interaction with guest speakers.

Student Reception of the Course

We had the problem of advertising the course to an audience that was, naturally, already overloaded by courses and various other activities. Because of the experimental nature of the course, and in view of the fact that we could not offer credits for the course itself, we did not market the idea too aggressively, and we limited our effort to the distribution of a few fliers to each one of our colleagues in the Department of Mathematical Sciences, and to some direct advertising in our own classes.

More homogeneity among the students would also be advisable, since this would stimulate a gregarious attitude among students which could prove useful to the well-being of the course. In our case, because the course is a non-credit experimental course, we did not aim for such a homogeneity and this has led to imperfectly balanced sessions and to disparity in the rate of learning.

When we explained in our first two meetings what the philosophy of distance learning is, and why we believe that this is an idea whose time has come, we found generally a very positive attitude.

After the first meeting the students seemed rather motivated. The student profile which the entrance questionnaire presents is fairly interesting. Without giving the breakdown of all the answers, we can say that the students' previous experience with distance learning was close to nil, and that virtually none of them knew about the existence of on-line courses and delivery methodologies. To be perfectly honest, this was a rather startling result to us, since we are probably biased by our own exposure to the use of high tech in education, and we believe that everybody should know about the existence of e-mail and of its manifold uses. We can definitely claim that this is not the case (and keep in mind that our sample was of students with an interest in computer architecture!).

A certain decrease in the attention and enthusiasm of the students has, unfortunately, been registered since the beginning of the course. Several causes may be suggested: our lack of energy in dealing with the day-to-day management of the e-mail load, the lack of a person to act as a stimulant for the discussions, and certainly the delay in establishing the international connection. We may take full responsibility for some of the problems, but others seem to point to concrete problems with this delivery system.

A definitive assessment will only be possible when students fill out an exit questionnaire at the end of the course.

Lessons Learned

"Those who forget history are condemned to repeat it." This is why we believe that the experiment has already been a success. Let us begin by pointing out some of the difficulties associated with an international distance learning course, which we had not foreseen, and which should be kept in consideration when such an effort is planned.

To begin with, the physical distance between the location where the course is received and the location where the course is directed is NOT irrelevant. We thought, at the beginning, that this distance could not count, since the e-mail does not distinguish between locations which are far away and locations which are close by. Well, this is not the case, because the inaccessibility of the professor who directs the course may indeed turn out to create more than one problem. In the case in which, for some reason, the local node where the course originates is temporarily disabled, the physical distance becomes a real problem, and the solution of this problem requires more time than one might think.

The another important aspect is the necessity of having a capable teaching assistant to monitor and guide the electronic components of the course.

We believed at the beginning, and have said explicitly [See (3)], that no specific material should be prepared for a course such as this one, and that the independent reading of the textbook could provide enough discussion material to keep the course alive. Once again, we overestimated the capabilities of the medium itself, and we underestimated the natural danger of student relaxation due to lack of appropriate stimulation. In our next experiments we will try to develop at least some materials which will be especially prepared for this purpose.

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A QUANTITATIVE REASONING COURSE IN GENERAL EDUCATION USING DISTANCE LEARNING

Stanley M. Zoltek

Distance learning was used to enhance two general education courses that fulfill George Mason University's analytical reasoning requirement. The goal is to challenge non-science students to develop problem-solving strategies that can be applied to real-world quantitative problems. Lecture notes were distributed over a computer network and questions were asked and answered via electronic mail. This freed students to work at their own pace -- and their thinking processes weren't cut short by some students "calling out" the answers before others had the chance to work through the problems. Both successes and difficulties are discussed, and we hope this will stimulate others to try similar experiments.

Introduction

We believe that distance learning is a powerful educational tool that can greatly enhance, and at the same time provide an alternative to, the general classroom setting. Specifically, in this paper we will discuss our experiences in conducting a general education course employing electronic mail (e-mail) and file transfer as a means of distributing notes, collecting assignments, and stimulating discussion and discovery. [The author's enthusiasm for distance learning techniques has grown out of his experience with the use of "electronic journals" in non-distance learning classes. See reference (2).]

What we learned from this course is shaping our plans for conducting future courses using distance learning. Much of what we tried was quite successful and we are pleased to share these with others through this paper. However, we will also discuss the distance learning strategies that did not work for us. We hope that summarizing our successes and problems will stimulate others to try similar experi-

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ments, and to develop new strategies to help avoid some of the difficulties that we encountered.

The Course

Our experiment in distance learning was conducted in the Fall of 1991 and the Spring of 1992. The courses involved were one section each of PAGE 125 and PAGE 225. The success of, and need for, distance learning as a teaching tool in these courses stems from the nature and design of both the specific courses and the PAGE program of which they are a key component. PAGE 125 and PAGE 225, Analysis and Solution of Quantitative Problems I & II, are the freshman and sophomore "analytical reasoning" (mathematics) courses in George Mason University's Plan for Alternative General Education (PAGE).

The PAGE program, winner of the Theodore Mittau Award for innovation in higher education, is an integrative inter-disciplinary set of courses that provides to full-time students an alternative to the distributional requirements approach to general education that is the norm at many universities. PAGE provides a diverse student body with unique opportunities to share in a learning environment that encourages and requires a great deal of student involvement. [See reference (1) for more on PAGE.]

It is the goal of PAGE 225 and its prerequisite PAGE 125, to provide a "user friendly" setting in which students can develop problem solving skills by applying quantitative methods to solve "real-world" problems. However, because of their position as "entry level" college courses for non-science majors, course instructors often face students with a diverse set of backgrounds, interests, strengths, and weaknesses. In fact, it is not unusual to have several students who have completed only two years of high school mathematics, a few who have taken a pre-calculus course, and one or even two students who have completed AP calculus.

The diversity of student backgrounds results in students progressing through the material in these courses at markedly different rates. Because of this, the classroom setting is not always the best place for student/instructor interaction to take place. We believe that each student needs the time to form his or her own approach to solving a problem or completing a computation.

For many of these students, this may be the first time that they have taken a course that focuses as much on student involvement and achievement as on "quantity" of material covered. The classroom setting too often provides a setting where the first student who "sees" how to solve a problem takes away the chance for other students to grapple with their own strategies. Also, sometimes certain students need specific feedback or guidance to set them into motion. Because of this, the student who "knows" the answer can also be the student who takes away the learning experience from the other students and relegates them to being observers rather than participants in the learning process.

The "unusual" composition of the student body taking PAGE 125/225 is unfortunately all too common among general education courses. The solution appears to lie in the seemingly contradictory idea of having students work together and separately at the same time. We believe that this can be accomplished through "distance learning" strategies.

Course Mechanics

Our first class meeting for both courses was on the Friday of the first week of classes. (Course meetings for PAGE 125 and 225 were held separately. The two courses were offered during successive semesters.) At this first meeting, written course material was distributed and a quick review of e-mail and file management was conducted. We also discussed computer viruses and how to protect against them.

We are fortunate that the PAGE program has a computer literacy course, PAGE 120, preceding the 125/225 sequence, and so we can expect that our students have used e-mail and uploaded and downloaded files. However, we found that this does not ensure that students will not have problems carrying out their daily assignments over the computer network. It appears that a number of students, even those who self-selected to take the distance learning courses, relied on their friends to sit with them and step them through sending e-mail and performing file management tasks. After the first few classes, these problems were cleared up by meeting individually with students who needed remediation on their computer skills. Also, a tutorial disk developed by the author [see reference (3)] was made available to the students. This tutorial steps students through the mechanics of e-mail and file transfer in a VAX/VMS setting.

Future courses will meet on Mondays to ensure that most technical problems are resolved before the end of the first week of classes. However, this will leave the last week of the semester with new material being covered without a class meeting for review before the final examination. This will be handled by holding extended office hours on the Friday of the last week of classes.

Course notes were made available by 5 am on Monday, Wednesday and Friday. Each set of notes had assignments keyed to the material covered. Assignments released on Monday, Wednesday and Friday were due by noon of the next Wednesday, Friday and Monday, respectively. These assignments were completed mostly off-line and saved in ASCII format. The students then uploaded the ASCII file to their VAX/VMS account and e-mailed it to the instructor.

Homework was reviewed within 24 hours and customized responses were sent to students. Since the next set of notes usually included solutions to homework assignments, it was not necessary to give much detail when responding to a student's work. Feedback usually consisted of letting students know that the assignment had been looked at, that they had solved the assigned problems correctly, or that they had made a mistake on a specific problem and should compare their work with the written solution that would appear in the next set of notes. A follow-up note was sent after the next set was released to check that students understood where they had gone wrong and whether they now understood how to work through the assigned problems.

A Sample Assignment

The first assignment in PAGE 125 is the "chocolate bar problem." We will state it exactly as it is presented to the students and then include two actual "solutions" provided by students.

> Problem
>
> You have this chocolate bar in the shape of a rectangle and composed of little squares of chocolate. There are 16 rows and 8 columns of these chocolate squares. You are a friendly person and want to share your chocolate with your 127 friends. So, you want to break your chocolate bar up into its 128 little squares.
>
> Exactly how should you break up this bar so that you use the least number of breaks?
>
> Think about this problem for at least 30 minutes. While you are working on the problem, keep a written log of your attempts to solve the problem. (Include details of those attempts that fail as well as those that solve the problem or come close to solving the problem.) Be sure to write up your best answer in a way which would be clear to one of your classmates.

Here are two solutions provided to me via e-mail by two different students.

The first student's answer.

From: (Name deleted)
To: MATHDEPT
CC:
Subj: HW 1

1-21-92
Dr. Zoltek
Assignment 1

There is a rectangle chocolate bar . . . composed of little squares. The bar has 8 columns and 16 rows of these squares and I want to break the candy bar into 128 pieces so that I can share it with 127 other people. I want to get the least amount of breaks so exactly which way should I break it?

First Try:

Well, the bar is made up of 8 columns and 16 rows so this turns out to be 128 little squares of chocolate within the bar. (8 * 16 = 128)

So, if I draw a picture of this bar, the first thing that comes to mind is to break it along each of the rows. If I did this, there would be 16 pieces broken off of the bar with 8 squares in each. I would then have to break each of the 16 rows down into eight parts. This means that there would be 15 breaks for breaking the bar by rows, then 7 more breaks within each row, which would be 112. So the total number of breaks would be 127.

Try 2:

Ok, I could break up the bar into halves down the column so that there would be 2 pieces of the candy bar, both with 4 columns and 16 rows. Then, break each half into halves down the 8th row (so far 3 breaks). There are now 4 pieces of candy bar with 4 columns and 8 rows. Now I could break each piece by rows so that there are 32 pieces of candy bar with 4 columns and 1 row. This move would impose 28 more breaks (the total would now be 31). I would then have to break each of the 32 rows into 4 parts. This would mean 3 breaks for each of the 32 rows (3 * 32 = 96). At this point, the bar is in 128 pieces and the total number of breaks would be 127.

Try 3:

This time I could start off by breaking the bar by columns, rather than starting with the rows. In this case I would have 8 broken pieces of candy bar with 1 column and with 16 rows. This would be 7 breaks so far. I would then break down each of the 1 column pieces into 16 parts, which would mean 15 breaks for each of the 8 pieces of already broken candy bar (15 * 8 = 120). At this point the bar would be in 128 pieces and the total number of breaks would be 127.

Conclusion:

It seems to me that no matter which way the bar is broken it always ends up having 127 breaks. Therefore I could break it any way and have the least amount of breaks possible.

The second student's answer.

From: (Name deleted)
To: MATHDEPT
CC:
Subj: HW 1

Homework Assignment #1

How can I break up a 128-piece candy bar with 16 rows and 8 columns so there is a minimal number of breaks? The most obvious way to divide the candy bar is to break off the pieces one by one. This method requires 127 breaks in the bar, so it is not the best way to go about it. Another way to break up the candy bar is to first separate the rows, which is 15 breaks, then stack the rows on top of each other and separate the columns, which is 7 breaks. This way there are only 22 breaks. The best way to divide the bar is to break it in half so the width is 8 rows, put one square on top of the other, and repeat the process until all the rows are stacked on top of each other. Then break the width of columns in half, so it is 4 columns wide, stack them on top of each other, and repeat the process until there are 128 pieces. This method only takes 7 breaks.

This first assignment was designed to demonstrate the importance of understanding a problem before we can solve it. The response given by the second student shows an awareness of this point. The first student made a decision as to what was meant by "breaking" up the chocolate bar and went ahead and solved the problem in that context. If the "chocolate bar " problem had been discussed in a classroom setting, it would have been quite difficult for the instructor to keep this issue of "how the chocolate bar should be broken up" from becoming a point of discussion. Instead, using the e-mail environment, it was possible to suggest to the first student to consider how many "breaks" will be necessary if we allow "stacking." That is, broken pieces can be placed on top of each other before the next break is made. The second student was asked to carefully formulate the definition of "allowable" breaks that would give rise to his answers. Others in the class who had more difficulty with this problem were given more detailed directions as to how the squares should be separated and then asked to work on the problem one more time. The condition given to these students was:

> You can use a straight edge to cut along a vertical line or horizontal line joining the edges of chocolate squares but you can not cut through two "separate" pieces of chocolate. That is, you can't "stack" the "broken" pieces of chocolate, nor can you place two separate pieces of chocolate next to each other and cut through both of them at the same time.

Now that this condition is given, it is the first student's solution that gives the "correct" answer. While the second student is now asked to rethink his solution, the first student can be asked to explain why, with the given definition of a break, there is no way to break up the bar with less than 127 breaks. (The answer is that each break separates off just one piece of the bar and since there are 128 squares of chocolate, it will take 127 breaks to separate all the squares.) The remaining students who didn't turn in the assignment or wrote that they were lost as to how to start the problem benefit from the next set of class notes suggesting an "outline" to follow when trying to solve problems. Because of the e-mail nature of the interaction, these students have not "heard" the answer and can still try to devise their own plan to solve the problem.

A similar pedagogical approach to that just described above was followed with the other topics that we covered in the courses. Students were encouraged to develop and fine tune their problem-solving methods by interacting with the teacher and other students in a distance learning setting.

Conclusion

In conclusion, the students for the most part were very happy with the course and reported that they were very motivated to learn in the distance learning environment. However, we have to keep in mind that this experimental class consisted of a group of students who volunteered for the class and so brought a good deal of self-motivation with them. Even so, a few of the less motivated students found it difficult to keep up with the material. To some extent, this was the case even with the strongest students.

Although e-mail and file transfer worked well for short assignments, we found that when longer "take-home" exams or projects were assigned, the students were actually burdened by having to type up and transmit e-mail responses that were more quickly and easily put down on paper. In the next trial of these courses we will have students do their longer projects on paper.

There is also a need for some "physical modeling" or computer simulation to take the place of blackboard diagrams that are not as easily transmitted via e-mail.

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MEETING THE NEEDS OF SPECIAL CONSTITUENCIES

THE POLITICS OF EDUCATION: ACCESS, EQUITY, AND EXCELLENCE INDIVIDUAL EMPOWERMENT THROUGH COMMUNITY

Pat B. Brewer

As increasing numbers of adult and nontraditional students find themselves compelled for a wide variety of reasons to pursue higher education, institutions must find ways to be responsive to the their special educational needs. The University of Georgia's Evening Classes is working to provide its students with a sound academic program, a strong student support system, and a collegial community which we believe encourages academic success.

The Challenge

Education is a political act and always has been. From Aristotle's *Politics* to Allan Bloom's *The Closing of the American Mind* the politics of education has been avidly debated. Any discussion of education raises fundamental political questions: who should learn what, when, where, from whom, with whom, and why? How a society answers these questions goes to the heart of the culture and determines the shape not only of the present but the future.

As the twenty-first century approaches and technological and sociological changes accelerate, educators are challenged as never before to face the issues inherent in these political questions. Philosophically and pragmatically educators must respond to the expanding and changing educational needs of the total population, among which adult and nontraditionals are comprising a larger percentage each year.

The Mission

While an integral part of the large and dynamic University of Georgia campus, Evening Classes is somewhat an anomaly, serving a role not unlike that of a

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Pat B. Brewer, Head, University Evening Classes, The University of Georgia, Athens, GA

community college. The student body of Evening Classes is a diverse one which includes adult, traditional, nontraditional, and part-time students who have a variety of educational needs, lifestyles, and experiences. Moreover, Evening Classes actively engages in a Community Outreach Initiative which is designed to recruit and support under-served members of the community such as women, minorities, and first generation college aspirants.

Evening Classes extends the quality academic program of The University of Georgia to evening students while concomitantly building support systems for students who, due to the nature of the program, may be isolated from the mainstream University population. In fact, Evening Classes students often have little or no contact with the University other than through class attendance. Thus, Evening Classes is challenged to develop and implement a program of studies which is recognized for its academic excellence, is accessible to a diverse student body, and promotes the empowerment of students and fosters their academic success.

Creating The Community

Faculty Development

To accomplish these goals it is essential for Evening Classes to work closely with the academic departments of the various schools and colleges of the University to ensure a sound academic program and quality teaching. The approximately one hundred faculty members who teach for the program each quarter have been recommended and approved by their respective academic departments. They range from tenured faculty, many of whom have been teaching with Evening Classes for years, to graduate teaching assistants, who teach for the program while pursuing doctoral degrees. Concerned with the need to provide meaningful faculty development for instructors of such diverse teaching experience, Evening Classes has developed a variety of strategies by which to achieve this goal.

Faculty development for Evening Classes has a double charge--improving classroom instruction in general and, more specifically, instilling within instructors an awareness of the special learning strategies that could enhance the educational experience of their adult students. In order to achieve these aims, Evening Classes has established four major approaches to faculty development: the individual interview/conference, which occurs when the faculty member is first employed; the quarterly faculty meeting, which reinforces information received at the individual conference and introduces the faculty member to instructors from other academic disciplines; the Faculty Resource Center, which allows the teaching faculty to communicate with their fellow instructors and with Evening Classes departmental faculty and staff on an ongoing basis; and the Faculty Forum, which brings together faculty in similar subject areas to discuss pertinent pedagogical issues.

Pre-employment Interview: Regardless of their connection with The University of Georgia or their academic rank, new instructors for Evening Classes meet in a pre-employment interview with the Evening Classes faculty member who serves as liaison to the academic department through which the course is offered. After assembling the necessary credentials for appointment, the Evening Classes departmental faculty member has the opportunity to address issues which are both procedural and pedagogical.

The interview process allows prospective instructors to learn more about the program and to gain insights into the needs and aspirations of the adult and nontraditional students that they will soon find in their classes. Departmental faculty, for example, stress to the new teaching faculty the importance of a detailed syllabus, which, along with other pertinent information, indicates clearly the attendance policy and the due dates for papers and exams. Adults, who often have complex lives with myriad obligations, are more successful in the classroom if they can plan ahead. New instructors are given departmental publications such as the newest *Catalog* and the current listing of classes (the *Quarterly Bulletin*) to use as resources. As a result of the interview process, a comfortable working relationship is forged between new faculty and the academic liaison; if problems should arise, teaching faculty know that there is a contact person within in the department who can be of help.

Quarterly Faculty Meetings: Many of the issues which are touched on during the individual conferences are treated more fully at the quarterly faculty meetings, where new and veteran teaching faculty become acquainted with Evening Classes faculty and staff. Every fall an invitation is extended to all Evening Classes teaching faculty to come together to discuss current trends and issues which might have an impact on their teaching with the program; for subsequent quarters, faculty meetings are held for new members of the faculty only. Agendas for meetings differ from quarter to quarter. At times, veteran instructors and students join the meetings as guest speakers, sharing the experiences which have made their time with Evening Classes significant. On other occasions, specific concerns, such as the effects of budget constraints on the program or problems with student withdrawals or make-up exams, mandate that the meeting take on a more pragmatic tone in an attempt to meet fiscal as well as academic challenges.

Faculty Resource Center: One of the most successful ongoing means of faculty development is the Evening Classes Faculty Resource Center. Open in the evening and located in the Journalism Building on The University of Georgia campus, where most courses are offered, the Faculty Resource Center houses mailboxes for instructors who teach in that building and serves as a gathering place and resource center. Since this office is staffed each night with an academic advisor and a departmental faculty member, instructors can ask questions regarding issues of concern and seek assistance for particular problems that may come up during the quarter. Just as important, the office offers instructors a setting in which they can engage each other in conversation concerning personal as well as professional issues. Too often instructors in a University setting become isolated from faculty from other academic disciplines. For adjunct faculty there is a particular need to provide opportunities for interaction and community. The proximity and informality of the evening office serves this function well by providing a meeting ground for faculty from diverse disciplines united by the commonality of their association with Evening Classes.

Faculty Forum: The Faculty Forum concept began as a means of bringing together Evening Classes instructors who teach in the same subject area for an informal discussion of effective teaching in the evening classroom. During Evening Classes Forums instructors share with each other those teaching techniques that they have used successfully in their classrooms, as well as apply group thinking to problems they may have encountered. However, the Forums have quickly evolved into much more than an arena for discussing teaching techniques. Participants explore ways of offering their students the tie between what is taught in the classroom and the contemporary state of the field, between theory and practical application, between current knowledge and planning for future development. Professors, graduate assistants, and part-time faculty all enjoy an opportunity to examine together class effectiveness through reports on educational research and spontaneous dialogue and to reaffirm their commitment to quality teaching.

To date, Faculty Forums have been held in the areas of foreign languages, science, health promotion and behavior, and business. In all forums participants have noted the positive effect of the student mixture in the typical evening class. The younger students enjoy having older students in the class who can bring the benefit of their experience to bear on the subject being presented. The older students appreciate the fresh vision of the younger students. Instructors have raised questions in forums that reflect these student perspectives, such as how to incorporate in class both facts and creative approaches, how to respond to the demands of both the academic and the business world, and how to develop awareness of interdisciplinary and intercultural elements while staying on track with the constant infusion of new material to be taught. The presence of these instructors in such a forum setting bears testimony to the twin facts of education: no teacher is ever perfect and no subject must be taught only one way.

Faculty/Course Evaluations: Another aspect of the support system Evening Classes faculty have found helpful are the quarterly Faculty/Course Evaluations. The evaluations, which allow students to express their opinion about the course and the instructor's role in the classroom, can help faculty to gain insight as to the effectiveness of their teaching techniques, presentations, and organization. The student evaluation data have also been used by faculty for letters of recommendation and professional advancement. From the students' perspective, evaluations present an opportunity to convey systematic input about the effectiveness of the instructors and the courses.

Curriculum Development and Scheduling

Strong curricula and flexible schedules are also essential elements in a program designed to promote the academic success of adult and nontraditional students. By taking into consideration the needs of students and by working closely with the academic departments of the University, Evening Classes has developed its curriculum and determined the schedule of courses. Students can choose from over one hundred courses each quarter from most of the schools and colleges of the University. The gradual expansion of the curriculum to include upper-level courses to enable students to complete degree requirements in the evening has been a major goal of the department.

In an effort to provide more educational opportunities for our students, Evening Classes expanded its former Monday and Thursday night schedule to one offering courses on Monday and Wednesday nights, Tuesday and Thursday nights (with classes offered at two periods, from 6:40 to 8:45 p.m. and from 8:50 to 10:55 p.m., on each night), and Saturday mornings. This schedule, which includes classes which meet four nights a week from 5:35 to 6:35 p.m., Monday through Thursday, provides more options for students in scheduling their courses around their responsibilities. The schedule also makes it possible for students to earn more credit hours per quarter than has previously been possible, thus allowing them to be full-time students if they so desire.

Academic Support Services

Evening Classes endeavors to establish for adult, nontraditional, and part-time students a quality program of study which also provides a supportive atmosphere conducive to a positive educational experience. Many adult and part-time students are returning to the classroom after years of working and establishing families. Some are anxious about starting college and are concerned about the lack of the basic skills necessary for their academic success. In response to these concerns, Evening Classes has developed a variety of programs designed to give students strong academic support that will further their success in college and encourage retention.

Pre-Admissions Counseling: Pre-admissions counseling has proved to be an effective early step toward providing a foundation for academic success. Orientation to Evening Classes begins when students enter the admissions and advising office for the first time. Students who are considering a return to school may experience conflicting emotions, ranging from excitement to apprehension. The nature of the initial contact such a potential student has with a counselor might well have a long-term impact on the academic careers of these men and women. For this reason, Evening Classes considers professional admissions counseling one of the most important first steps toward a successful collegiate experience.

Academic Advising: Required academic advising is a basic academic support service that affects all Evening Classes students. The staff is available to meet with students on both an appointment and a walk-in basis from 8 a.m. to 5 p.m. Monday through Friday in the Evening Classes Office. In order to accommodate the schedules of adult and part-time students, advisors are also available from 5:15 to 9:15 p.m. on class nights in the department's evening office located in the Journalism Building where most classes are held. Each quarter, students are required to meet with their advisors to plan their schedules for the following term.

The work of an academic advisor includes a variety of contacts with students. The advisor helps students to clarify their long-range educational and career goals and to put together appropriate programs of study. Students are informed about the opportunities, options, resources, and services available to them within the department and throughout the University such as the University Counseling and Testing Center or the University Tutorial Program.

Study Skills Workshops: To further assist students with their transition into college and to prepare them for academic success Evening Classes offers Study Skills Workshops in which skills and techniques for test-taking, time management, and the improvement of study habits are taught. These free workshops are open to all Evening Classes students.

Math and English Labs and Reviews: Math and English courses, which are a part of the core curriculum for most University students, can often be a source of anxiety and lack of confidence in returning students. In an attempt to insure students' progress in basic course work, Evening Classes has established Math and English Labs. These two-hour labs are offered quarterly, two nights each week. Students who need help with a difficult math problem or who need to polish their writing skills are encouraged to take advantage of the appropriate lab where they receive individual attention from instructors who are trained to provide the specialized academic support these students need.

For perspective students who may feel extremely apprehensive about returning to math and English courses, especially when there has been a significant lapse in time since the previous classroom experience, Evening Classes offers math and English Reviews which treat subject matter that should be mastered by students before they enter formal math or English courses. Students who pay a small fee and complete one or both of these non-credit math and English review courses should feel more confident when they make the transition to credit courses.

Computer Assisted Support Services: A recent addition to the academic support system in Evening Classes is the NOVANET computer program. The program provides instruction in many areas including math, reading, composition, and foreign language. Students can use NOVANET to review before taking classes, as a tutoring aid while taking a course, and to prepare for the Regents' Test.

Student Support Services

Because Evening Classes students can experience a sense of isolation from the University and the numerous activities and services provided for day students, Evening Classes has a special mandate to offer student services appropriate for the particular needs of our students.

Back-to-School Workshops: The department sponsors several Back-to-School Workshops each year, using a variety of program formats designed to inspire, encourage, and inform adults who are contemplating returning to school. Workshops have been offered during the lunch hour for University of Georgia employees and on weekends and at night for community people. Guest speakers have included current and former Evening Classes students, who share their experiences in balancing their academic pursuits and their busy and complex lives, and Evening Classes faculty members, who give prospective students a taste of what it would be like to take notes in a college history class or analyze a poem in an English Literature course. Prospective students also meet the department's academic advising staff and learn of the myriad support services available to them through Evening Classes and the University.

Orientations: New Evening Classes students are encouraged to attend one of the orientation sessions held prior to registration each quarter. At the session, students receive information about policies, procedures, degree program requirements, and the available academic support services; they also receive information regarding Evening Classes staff, facilities, and flexible scheduling options. Of immediate benefit to these students who are registering for the first time are the detailed instructions on registration procedures.

Career Counseling: Although many evening students have well-defined goals in mind when they return to school, for those who do not Evening Classes offers career counseling at no cost to currently enrolled Evening Classes students. A career counselor is available to assist students in exploring career directions, writing resumes, and planning job campaigns. A career workshop is also held each quarter for students who desire an overview of career planning before beginning individual counseling.

Student Resource Center: Just as the Faculty Resource Center has become an important facet of Evening Classes' faculty support system, the Student Resource Center is becoming increasingly more important to the student support system in the department. The Student Resource Center is both a concept and a physical entity. While the Student Affairs Office of the department serves as a daytime resource center for students, the evening office serves as a nighttime Student Resource Center. The office is staffed four nights each week with an academic advisor who is available to advise students who find evening advisement more convenient. The recent addition of a computer to the office allows access to the University's mainframe and thus provides on-the-spot access to student records, a convenience which greatly facilitates advising and counseling in the evening.

Publications

One of Evening Classes' most crucial challenges has been to establish channels of communication which link evening students and faculty with both the University community and the community at large. Thus, the dissemination of information about the program's mission has been vital to the department's goal of providing a sense of community among students, faculty, and staff and encouraging academic success. Evening Classes has developed strategies by which our students and faculty as well as the academic community and the public can be better informed about the program's goals.

Evening Classes Quarterly Bulletin: One significant communication channel has been the *Evening Classes Quarterly Bulletin*, the department's most widely distributed piece of literature which includes an inventory of courses offered by the program as well as a comprehensive coverage of policies and procedures which are specific to Evening Classes. Each quarter an Evening Classes student is pictured along with a quotation from the student which expresses how he or she feels about the educational opportunities Evening Classes has provided. The current theme of the *Quarterly Bulletin* is that "Evening Classes Can Brighten Your Future." This theme is carried out in other informational and promotional literature.

The cover of the *Quarterly Bulletin* features a picture of the well-known University of Georgia Arch photographed at night. This dramatic arch-at-night photograph has become the official logo of Evening Classes and is used on most of the program's promotional materials. As a symbol of the program, the arch-at-night epitomizes Evening Classes' desire to translate The University of Georgia's academic strengths into a more accessible program for adults. By using the arch-at-night as a recurrent theme, Evening Classes hopes to evoke this idea while simultaneously establishing instant recognition of the program's promotional and informational literature.

"Night Notes": In order to keep Evening Classes students and faculty apprised of current happenings in the program and on the campus, a newsletter, "Night Notes," is distributed to students and faculty several times during the quarter. Examples of the kind of information found in "Night Notes" are the dates and times of the English and Math Placement Tests, the dates and times of Study Skills Workshops, and a reminder of the examination schedule.

Night Line: Three quarters each year, Fall, Winter and Spring, a feature magazine, *Night Line*, is published and distributed to all Evening Classes faculty and students and to other selected points around campus and in the community. *Night Line* has been well received by students and faculty who find the articles profiling individual faculty members and Evening Classes students interesting and informative. *Night Line* consists of three main sections: " Faculty Focus," " Student Scene," and "Departmental Notes." "Faculty Focus" profiles outstanding Evening Classes faculty whose personal and professional accomplishments and dedication to teaching make them valuable assets to the program. "Student Scene" features Evening Classes students at various levels in their degree programs who somehow manage to balance their complex lives of work or family with their academic endeavors. "Departmental Notes" provides an opportunity for Evening Classes to highlight aspects of the program that are of interest to both faculty and students. The many pictures in the magazine are an added attraction. Candid shots of Evening Classes students and faculty are taken at registration, at the quarterly socials, at orientation sessions, at faculty meetings, and sometimes in the classroom. Both students and faculty seem to enjoy seeing themselves and their friends and associates featured in *Night Line*. Of special note is the Academic honors section which lists those Evening Classes students who have earned a place on the University's Dean's List or the Evening Classes Honor Roll.

Evening Classes Catalog: The Evening Classes staff, recognizing the need for a permanent informational resource for Evening Classes students, had its first Evening Classes *Catalog* ready for distribution Fall Quarter 1988 and is currently preparing the Fall 1992 *Catalog*. The *Catalog* contains the academic calendar for the year, comprehensive statements of policies and procedures unique to Evening Classes, and a complete inventory of courses of instruction offered by the program. Sprinkled throughout the *Catalog* are pictures of Evening Classes students engaged in various activities as they pursue their educational goals.

Adult Learner Brochure: The department has recently produced an adult learner brochure which once again uses the "arch-at-night" logo to symbolize the University's academic program made accessible. The colorful brochure includes pictures of representative Evening Classes students and their testimonials about the program and carries out the theme "Evening Classes Can Brighten Your Future."

Other methods used to inform people about Evening Classes have been brochures, business cards, and radio and television announcements. Like all the other promotional materials, they have been designed to communicate the message that Evening Classes extends a quality academic program to adult, nontraditional, and part-time students within a schedule designed with their special needs in mind.

Conclusion

It is no easy task to create a learning community which is at the same time accessible, equitable, and excellent. It is even more challenging to sustain such an environment in the wake of the powerful forces of rapid change and limited resources. Yet, for those of us who maintain that education continues to be the best guarantor of individual "success," the obligation to help students succeed in higher education is a driving force. Evening Classes is endeavoring to create and maintain a learning environment in which a supportive, nurturing sense of community fosters individual empowerment.

SOME THOUGHTS ON EFFECTIVE MANAGEMENT EDUCATION FOR NONTRADITIONAL STUDENTS

Jefford R. Cornwell

Tailoring learning approaches to the characteristics of nontraditional students can make their management courses significantly more effective. Examining the backgrounds and needs of these students helps in developing a useful learning culture and overall learning objectives. It also facilitates identifying specific learning modes that work exceptionally well. Several techniques that enhance these approaches are noted.

This paper presents ideas and considerations regarding effective approaches for educating nontraditional students taking undergraduate business administration courses. One purpose is to record observations about approaches that seem to enhance learning in this setting. Another is to offer some insights as to why these methods succeed in meeting the needs of such students. My hope is that the ideas will provide a useful frame of reference for thinking about ways of improving actual courses. The suggested approaches apply primarily to management courses such as organizational behavior and marketing, as opposed to those in accounting or quantitative methods.

Nontraditional management classes, of course, tend to include a much wider range of student ages than the typical traditional situation. Ages ranging from the early twenties to the middle fifties are not uncommon. With this comes a relatively high degree of diversity in backgrounds, needs and goals. In terms of educational background, nontraditional classes may include first time college students, as well as people with various undergraduate degrees. Some of the students have not been in school for many years.

Most of these students have full time-jobs and significant work experience. Their occupations vary widely, including such diverse types as psychiatric nurse, political manager, and electrician. A considerable number have a variety of lower to

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middle level administrative jobs. The wide variations in education and experience translate into substantial skill differences among the students, as well as differences in their perceived learning needs.

A few nontraditional students have outstanding verbal skills, but mediocre writing and speaking abilities are more typical. Many specifically indicate a desire to improve, especially with respect to speaking. Most also express the desire to be more effective in dealing with others, particularly when in groups. The differences in interpersonal competence are considerable and seem to bear some relation to the variations in occupation.

Relatively few nontraditional students have well-developed analytical abilities. The students typically want to learn facts and theories, but usually don't come to the situation with a felt need to become more analytical. Many come encumbered with an array of management myths, although often with the notion that these need to be questioned. Of course, they also bring a collective wealth of experience, which is waiting only to be transformed by analysis into new insights about management.

The foregoing discussion highlights several similarities, as well as several differences, characteristic of nontraditional business students. It also identifies some felt learning needs of students, along with some others implied by the writer. Two other special needs of these students should be noted.

The first of these is the requirement to provide reassurance and psychological support for students who have not been in school for some time. Included among their concerns are worries about handling the workload and worries about their intellectual adequacy. Alleviating these concerns is critical to their success. The second is the need to make prudent allowances for the skill shortcomings of some students. This is not to say that crucial standards should be eliminated, but that the approach should be tailored to allow them to acclimate to the situation.

A final area of nontraditional business student characteristics to be noted falls more along the lines of a typical orientation, rather special needs. These students are often focused on near-term, direct applications of what they are learning. They often literally plan to use it next week at work. Another aspect is the requirement of an industrial or other sponsor that tuition payment is contingent on a specified minimum course grade. This may be motivating, but also can result in a special apprehension about grades.

My overall observation is that the diversity in nontraditional student backgrounds and needs rarely produces conflict but does produce a wide variety in perspectives. Accommodating the range of student differences is a challenge to the instructor. On the other hand, the breadth of experience available represents a prime set of resources for enhancing the learning process.

There are several key aspects to creating a learning culture and climate which are consistent with the range of nontraditional student skills, while being responsive to the differences in student needs. It also is important to create a learning climate in which student work experience can be brought usefully to bear.

From a helping standpoint, coaching on study techniques is often necessary. This may involve pointers on study habits, reading techniques, and even how to skim material for the main ideas. It also may involve coaching on how to approach written assignments, as well as on the writing process itself. Preparation for and taking of tests is another area in which it may be useful to guide nontraditional students. Each of these aims at specific student shortcomings.

In terms of relieving student apprehensions, nothing is more effective that concrete feedback. Therefore, it is important to schedule tests and assignments early in the term to provide this. Even when the results are not positive, at least the students become better calibrated about what is expected of them. Since many students will make such adjustments, continued, fairly frequent feedback also contributes to creating an effective learning culture for nontraditional students.

Another aspect of creating an effective learning culture is to maximize student choices regarding assignments. An example would be leaving the topic of an assigned paper up to student discretion. This type of approach allows the students flexibility in coping with their shortcomings. It also allows more opportunity to draw on their own experiences, and to explore issues of special interest from a work organization standpoint.

Bringing the resource of nontraditional student work experience to bear is another key aim. Small peer groups with a problem-solving focus are great vehicles for capitalizing student experience. Disregarding other group effects, this mode removes the instructor as an authority figure from the situation, and provides added stimulation of ideas from the other group members. As a result, students seem to be more inclined to call upon their experiences to make their points.

A key prerequisite to the effective sharing and critique of experiences is trust. It is essential to establish a strict class norm of non-attribution regarding personal experiences. Many nontraditional students are fearful that their comments, stories, or analyses will somehow get back to their employers. This is a legitimate concern that the instructor must take the lead in resolving, not only for discussions, but also in relation to written assignments.

It is now appropriate to focus briefly on overall learning objectives addressing the needs of students with full-time work organization responsibilities. Structural issues to be considered include the tradeoffs between content and process learning, along with the tradeoffs between theoretical and applied focus. Taking into account the typical expressed needs of nontraditional students, a balance that gives process issues reasonable attention makes sense. Similarly, the frequent desire to quickly use in the workplace what is learned in the classroom militates for emphasis on the application of concepts. This is not to say that adequate content coverage and a sound conceptual foundation should be overlooked as course aims.

A broad learning objective compatible with these ideas is the goal of developing effective leadership and teamwork skills. This kind of thrust inherently serves the expressed student needs for increased inter-personal competence and improved oral communication because of the interactions required. Moreover, the concepts of leadership and teamwork embody a wide range of issues that at face value are relevant in the context of applied management education.

Another broad learning objective that fits well from a structural standpoint is the goal of developing problem-solving skills. There clearly is an emphasis on process and at the same time a focus on application in terms of searching for and finding solutions. A few of the more sophisticated students express the need to become better problem-solvers. In addition, this goal addresses the general student shortcomings in practiced analytical ability.

The foregoing ideas are intended to suggest that the overall objectives of developing leadership, teamwork and problem-solving skills are useful irrespective of the specific learning goals of the course. These types of overall objectives certainly fit with the typical nontraditional student desire to apply what is learned to the workplace. They also provide the opportunity to take advantage of experiential learning processes in groups.

Several specific learning approaches seem to be exceptionally effective with nontraditional business students. However, one general point to be made at the onset is that a diverse combination of approaches goes a long way toward enhancing educational effectiveness. Since traditional classes are often relatively long, a mix of approaches often helps to overcome boredom. A more important reason for employing a multi-mode approach is that this type of model maximizes the variety of learning stimuli, thereby increasing the likelihood that students will respond usefully.

Inevitably, the lecture approach will constitute some part of classroom activity. Considering the typical length of nontraditional classes, it is crucial to make this a minor fraction of the total time to avoid boredom. Such mini-lectures might focus usefully on highlighting crucial issues, on reinforcing important concepts, or on explaining exceptionally complicated models. All the usual techniques for keeping student interest apply, but stories dealing with work organization specifics may be especially helpful with nontraditional students.

Classroom discussion is another learning approach that may be used either by itself or in conjunction with a mini-lecture. The targets of the discussion may vary widely including issues derived from the readings, cases specifically under analysis, or topical business issues of general current interest. One certainty with nontraditional students is that there will be some questions, as well as inputs on their work organization experiences. It is important to allow time for this participation in order to increase student involvement in the learning process and to tap the resource of student work experience.

A technique that is particularly effective in enhancing learning in the discussion mode is the use of self-evaluation instruments. An example would be a questionnaire for assessing managerial style. Nontraditional students seem to find these data intrinsically interesting and useful because of their work organization roles. It is especially valuable for the instructor to plot the results for each student on the board, so that the class can observe the distribution and where their individual scores fall.

Individual writing assignments are crucial to the effective learning of all students, full-time and nontraditional alike. This is where they are forced to recognize their assumptions and articulate their arguments logically for the record. The discipline of reducing ideas to writing is essential to developing analytical skills.

The effective use of individual writing assignments depends heavily on critical written feedback from the instructor. One approach that helps is to reiterate questions such as: what happened?, what effect did it have?, and what were the underlying reasons for both what happened and its effects? These questions aim directly at stimulating analysis by the student.

One final thought on the use of individual writing assignments for nontraditional students involves standards. It may be useful to temporarily reduce the grade impact of weak syntax for students who have not been in school recently. Their shortcomings should be included in the instructor feedback, but emphasis on analytical success may be more effective early on. This gives them an opportunity to adjust without too great a grading penalty for lack of experience as a college student.

A versatile learning approach that is exceptionally effective with nontraditional students is the use of small peer groups. In part, this is because of the similarity of the group setting to many work organization situations with which they are familiar. Groups of four to six students also are ideal vehicles for developing leadership, teamwork and problem-solving skills. This group size allows for a reasonable diversity of individual interactions, while being small enough for everyone to participate actively.

In order to optimize the small group approach, it is useful for each group to be reasonably representative of the class population. This will tend to normalize the learning experience among the groups, and also tends to maximize the cooperation required. Achieving this type of balance argues in favor of the instructor choosing the group members. Obtaining a nominally representative age mix, for example, might be a useful goal.

Some degree in stability in group membership enhances learning by allowing the time for effective interactions to develop among the members. Several class meetings seems to be a reasonable minimum duration. On the other hand, it also seems useful to shuffle the groups at intervals during the term. At least one complete shuffling of members significantly increases the diversity of personalities with which each member has the opportunity to interact. It also can provide a more equitable distribution of skills if test or individual paper grades are available for use as selection criteria.

Included among typical group activities in the classroom are problem-solving exercises such as mini-case analyses and quantitative simulations. Requiring handwritten and oral reports from each group is a means of enhancing learning effectiveness. This leads to increased involvement and participation, especially when the reports are graded.

Other in-class group activities could include exercises that are specifically experiential such as role playing and organizational simulations. Examples might include active listening practice or resolving inter-group conflict situations. Again, one key to enhancing learning is the explicit sharing of any data generated, by posting it on the board. This helps to focus the discussion on similarities and differences in outcomes among the groups.

Possible types of group projects for work outside the classroom include business simulations, major case analyses, and research projects. With nontraditional students, the group analysis of a major case is a strong preference. The needs for significant non-classroom instructor coaching and use of campus facilities such as the library or computers militate against use of simulations and research projects. Moreover, group case analysis with written and oral reports is highly relevant from a process standpoint to a number of common types of work organization tasks.

One technique that facilitates the use of outside case analysis projects is instructor coaching on planning and progress. Because nontraditional classes tend to meet less frequently, there is more likelihood of groups falling behind before they realize it. Encouraging them to develop plans that show individual task responsibilities and completion milestones tends to increase the probability of success.

The final learning approach to be addressed is testing. Essay and short answer tests have many of the advantages of individual writing assignments. Of course, they are similarly difficult to grade. Objective tests such as the multiple choice type make grading relatively simple. They provide a suitable means for assessing the grasp of content, if not the ability to apply a concept correctly. This type of test also has great potential for use in a group learning mode.

One possible scenario goes as follows. Each student takes the multiple choice test as an individual, turning in an answer sheet upon its completion. The same test is then redistributed for taking by each small group with the members working for a consensus answer to each question. The group then turns in its answer sheet. Both the individual and group tests are graded and counted toward the course grade with all members of a group getting the same grade on the group test.

The foregoing approach has several advantages. The individual taking of the test assures that individual student must cover all assigned material. The group taking of the test generates additional learning in the give and take of the discussion to determine which answer is correct. Finally, this process also inherently serves the overall learning objective of developing teamwork.

Before concluding the discussion on learning approaches, two additional thoughts on the use of small peer groups should be noted. First, it usually is preferable to allow them to organize on their own. This seems to increase the sense of responsibility of the members. Moreover, nontraditional students typically don't want help with this anyway because of their experience in organizing at work.

Secondly, it seems useful to incorporate some form of peer ratings that compromise a small fraction of the course grade. This works against social loafing, or penalizes it, as the case may be. It also allows for the rewarding of exceptional contributors by the group. Nontraditional students, in particular, seem to find the assessment of group member contributions an appropriate way of achieving fairness in the group situation.

A few comments on the grading system are in order. For one thing, it is important to determine the weight to be given to each course assignment prior to the first class. This information should be disclosed fully to the students at the onset so that they can understand what the instructor thinks is important. It also will help them to make effort tradeoffs which can be especially useful for nontraditional students.

The recommended use of multiple learning approaches also has an advantage from a grading standpoint. Since evaluation will be based on a variety of assignments, the criticality of any one measure to overall student success can be reduced. A grading system in which the points are well-distributed among the different learning approaches especially makes sense for nontraditional students, considering the typical diversity of their skills.

One issue of particular interest in determining assignment weights is the allocation of points between individual and group assignments. On one hand, there needs to be enough weight given to group assignments to incentivize group involvement and participation. On the other, excessive weight given to group activities is likely to violate student perceptions of fairness. In terms of what seems to work, a balance with from 30 to 40 percent of the points based on group assignments is effective and appears to be acceptable to nontraditional students.

One final thought on evaluation regards disclosure of course grades to individual students. If it can be worked out, it is a nice touch to set aside some time in the last class session or exam period for a personal discussion with each student. With nontraditional students this has a potential similar to the familiar appraisal interview. If handled well, it can reinforce useful learning, point to areas where improvement is needed, and provide encouragement for further academic endeavors.

Two types of instructor-generated course documentation can have a significant impact on enhancing learning. A very comprehensive syllabus is especially useful for nontraditional students. Included should be the usual course objectives, assignment descriptions, grading system, academic ground rules, and an outline of class session topics. What is different in this case is the need to be especially thorough in making the syllabus a stand-alone document for use away from campus.

Agenda-like outlines for each class session also have a high utility in conducting the relatively long class sessions often scheduled for nontraditional students. The document should begin with a list of any assignments to be turned in. An outline of any unfinished items from the previous class session should follow. A chronological agenda for the activities scheduled for the present session should be next, along with a summary of the key topics and issues to be addressed. In preparation for the next class session, an outlined preview of key topics should be included, as well as hints on how to approach reading assignments. For example, areas to skim only, or areas to read carefully, might be noted. Finally, there should be a reminder of assignments due, or tests scheduled, in the next class session.

The entire class session outline should be no longer than two pages of double-spaced entries. Although it takes some extra instructor effort, the payoffs are significant. One is in terms of the efficiency in conducting long classes. Others which are more important include the benefits to students in planning their study efforts and in preparing for tests.

The foregoing discussion summarizes some thoughts on approaches for making management education more effective for nontraditional undergraduates. Several of the ideas presented borrow significantly from the practices of others. In particular, I would like to acknowledge the stimulation of ideas, arising from techniques used by Professor J.B. Ritchie and his associates at Brigham Young University. Accountability for the logic presented for various approaches, as well as the characterizations of nontraditional students, remains with the writer, of course. My hope is that one outcome of this effort will be to stimulate additional thinking about ways to improve management courses for these students.

ASSESSMENT: THE HELMSMAN'S PERFECT TOOL

Elizabeth Crowther
Jerome J. Friga

Assessment can help institutions suffering cutbacks and wrestling with curricular debates to utilize new instructional delivery mechanisms, reallocate shrinking resources, develop new funding sources, renew faculty, and create incentives for implementing nontraditional or interdisciplinary courses for study. The assessment function provides both the tools and the expertise with which colleges and universities will restructure for survival as well as efficiency.

Assessment is the system-supported procedure used by higher education institutions to guide, what is for most organizations, a natural cycle of review and evaluation. The "natural cycle" is becoming increasingly complex for colleges and universities because of a proliferation of influences suggesting that institutions satisfy many learning needs and interest groups, and in many cases, do so with less funding. Assessment can mitigate the confusion by providing important tools to help effect institutional change that reflects special needs of adult learners in a global society. As Ewell (1988) notes, "assessment is about institutional change; an ultimate objective is to help create a campus culture that is better informed about and more conducive to improvements in teaching and learning" (p. 15).

An apt analogy for successful change is that of assessment coordinators and instructional leaders acting as helmspersons guiding a dynamic assessment process. As helmsperson in this adventure, the educator merely utilizes a system already available at the institution, and in the case of Virginia, funded, blessed, and required by the state. Institutions in Virginia and other states that require and/or support assessment are "outfitted" for the curricular challenges, and it is up to their "helmspersons" to untie the lines and direct them on their charted courses.

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Charting the Course

The College

Combined forces of retrenchment and competing interest groups threaten quality of existing programs, as well as innovations, nontraditional offerings, and professional development activities in higher education. It continues to be difficult for institutions to determine what programs their constituents need and to fund these programs at acceptable levels. Community colleges are a good example of institutions that are stretched as they struggle to maintain quality and access under conditions such as those in Virginia, wherein, "since 1978, student enrollment has increased 30 percent, while supporting staff has declined 11.5 percent and the teaching faculty has decreased by 9.4 percent" (SCHEV Council Notes 12/10/91).

The assessment function exists in this state to provide both the tools and the expertise with which all colleges can restructure for survival as well as efficiency. In microcosm, assessment determines if curricular objectives and aims have been met through instruction. In macrocosm, assessment also provides information that reflects success, or lack of success, in adhering to the institutional mission. Many educators are noting that now is the time to re-examine missions and re-design institutions to function as they are most effective. Whetton (1980), for one, recommends that, in retrenchment, institutions must find their niches and concentrate on providing the services they perform best. In some cases, "comprehensiveness" and "access" will be written out of the mission, but their absences would not necessarily mean reduced quality for a particular institution.

For example, is it not really a sort of intellectual laziness to retain a comprehensive mission when marginal or inefficient programs could be cut or combined and an institution could reallocate resources to develop new ways to expand upon those things it does well and has a steady market for? Assessment, because it is a system already in place for most institutions and providing information, becomes an important tool to support the type of strategic planning Kotler and Murphy (1981) recommend that educational institutions adopt.

The Student

Once the institutional mission is (re)established, institutional helmspersons will be able to interpret the educational course for students. Margaret A. Miller (1991) relates that clarifying the goals for the curriculum and translating those goals successfully to the students is imperative for success. Hockaday and Friga (1990) propose a model for clarifying goals and evaluating student success. This model, which is based on cyclical consideration of AIM, ASSESSMENT, and ACTION, works well in the current atmosphere of retrenchment because it is dynamic, encourages constant evaluation, and facilitates change. AIM is either a long- or short-range objective that faculty or administrators hope students will achieve in a program. ASSESSMENT is the process through which program effectiveness is measured; outcomes are analyzed to evaluate degree of effectiveness. ACTION describes the recommended changes or improvements, which often may lead to adjustment in program AIMs or ASSESSMENT instruments.

Six questions frame Hockaday and Friga's assessment model:

1. What is the AIM of the program? These are described as intended student outcomes.
2. How strong is enrollment or participation in the program?
3. What is the quality of the service performed?
4. Are quality facilities and equipment in use?
5. Do student outcomes match program AIMs? This is the measured degree of success based preferably on multiple criteria.
6. What ACTION is suggested? ACTION should be program or assessment changes based on answers to the five previous questions.

The strengths of this model in facilitating review and improvement are twofold. Initially, the simplicity of its design encourages wide participation by faculty and administration, as has been evidenced by its use during the past four years at Rappahannock Community College in Virginia. In addition, the introspection and dialogue promoted by this process have contributed to college curricular improvement, to establishment of concepts for student success, and to efforts to expand faculty development.

This type of assessment model can outfit an institution to appropriately evaluate student success, instructional assets and deficits, and curricular trends. And the simple design facilitates an institution's effort to assure that the "form and content" of assessment are "consistent with the institution's distinctive mission and educational objectives" (Ewell 1985, p.115).

The Winds A' Blowing

Many curricular issues and trends are eddying around and may impact the mission statements or instructional directions of higher education institutions. Studies tell us that we have a more diverse workforce that can no longer compete in a global market because of its weak skill base. At the same time, educators dispute the need for the curriculum to reflect more international or multicultural information. Contention also settles around whether the curriculum in higher education is the proper forum for disseminating "politically correct" notions about race and gender relations.

Jerry Gaff (1991) puffs optimism into our sails by noting that "talk is leading to action" that is constructing significant changes in the higher education curriculum. In the mid-1980s, Bok (1986) accented, for instance, that educators should shift their concentration from student outcomes to how the students are learning. What instructional methods are more effective? What can instructors do to enhance learning? Astin (1985) says spend time with students and involve them in programs. Roueche (1992) encourages instructors to be available, care, and share. But how are these concepts actually embodied?

These concepts are being translated into action designed to meet the needs of adult learners and serve the interests of the many special groups on campus, often as a result of assessment activities. Skills such as writing, presentation, and critical thinking, for example, are being revised into courses across disciplines as a result of faculty collaboration. Educators are beginning to view knowledge acquisition as happening, not from a linear progression through required courses, but through concentration on topic areas, themes, or problems that may outgrow disciplinary lines (Bok, 1986). Faculty collaboration and involvement in curricular processes is key to serving student interests, and on many campuses now, assessment is the catalyst bringing faculty together.

Interdisciplinary and nontraditional programs that are arising reflect the curriculum's response to the need for more flexible and integrated training. Studies such as "The Virginia Plan for Strengthening the Commonwealth's 21st Century Workforce" (1991) indicate that living and working in a global society will require skills beyond basic subject comprehension. Our educational system must prepare to produce workers and citizens who are not only competent in certain skills, but capable enough to be retrained quickly to perform fast-changing technical jobs and flexible enough to perform across the plane in the more "flat" organizations of the 21st century. Traditional, linear curricular models do not reflect a concern with connectivity and "global" patterns.

Interdisciplinary models tend to better encourage connection and synthesis in the curriculum by being more comparative. One such interdisciplinary arrangement active at the University of Minnesota at Twin Cities requires that specific areas or themes, rather than specific courses, be taken in the core. Twin Cities' "diversified core" requires students to take six courses whose content would cover cultural diversity, international perspectives, citizenship and public ethics, and environmental issues. One of many designs geared to making learning more relevant, the Twin Cities program reflects pluralistic leanings of "people . . . trying to deal with the complexity of the global community and the global experience" (Mooney, p. A15).

Re-establishing the Course

The Carnegie Foundation for the Advancement of Teaching (1978) contends that the curriculum is remarkably slow to change; nonetheless, current fiscal and social pressures are forcing change in patterns previously unencountered in higher education. American higher education has experienced often phenomenal growth in its nearly three hundred year history, and only in the 1980s has it begun to deal with issues such as retrenchment and downsizing. Similarly, strong presidents and a unique governance structure have traditionally protected academic freedom and autonomy for faculty; however, constituencies now demand accountability and increased curricular relevance from these institutions. Assessment --a practice designed to measure the effectiveness of instruction and provoke change in the curriculum-- is proving to be one of the most useful tools that institutions have to help them work through issues of accountability and curriculum improvement.

In the first place, assessment evaluates student outcomes to determine how effective instruction is. In the process of measuring and improving instruction, institutions find which programs and methods are strong and why; they also discover which programs are weak or marginal. In the growth years, institutions were able to carry marginally efficient programs under the banner of comprehensiveness, but in retrenchment, the health of the institution may depend upon a new tack. An institution may want to get out of those programs entirely and reallocate instructional resources or combine resources with another area to produce more effective outcomes.

Hockaday and Friga's model utilizing AIMs, ASSESSMENT, and ACTION can drive this evaluation process for an institution. Having set AIMs and appropriately analyzed ASSESSMENT data, the institution is ready for ACTION on curricular decisions. At this point, the institution knows which programs and courses are under-enrolled, too costly, or ineffective for one reason or another. It also understands what instructional methods and courses are effective, as well as what areas students and potential employers are willing to support.

With this information, institutional helmspersons may begin to re-design the curriculum. Suppose, for instance, that an institution's curriculum team devised a formula that determined two programs were inefficient and should be discontinued. There is no great backlash from students, because few were enrolled in these programs. The faculty members are reassigned to other areas where retraining or helping to devise new curricula become renewal exercises. It happens that one of the faculty members has the technical expertise to establish new delivery methods in a developmental area. The other faculty member, an adjunct who works full time for a local industry, becomes so excited about the possibilities for an interdisciplinary program at the college that she convinces her corporation to endow a lecturer position.

This hypothetical situation is not unrealistic, particularly if institutions embrace assessment as an opportunity to help initiate progressive change, rather than going unimaginatively through the motions. The process is already in place in many institutions, and it is gaining the support of faculty who are appreciating its value as a vehicle for change. Imaginative use of this tool will assure that, even in troubled fiscal times, institutions will find a way to meet adult learning needs and even implement new, nontraditional programs.

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THE WEEKEND FORMAT FOR GRADUATE STUDENTS: STUDENT PERCEPTIONS

Donald C. Dendinger

Nontraditional and interdisciplinary programs strive to schedule classes which provide maximum access for students. Past conferences have dealt with scheduling classes on the weekends. Last year a presentation included a study of faculty perceptions. This paper continues the assessment of the weekend format with perceptions of students. Results from student evaluations from nearly 400 students suggest that courses taught in the weekend format can be as effective as those taught during the traditional weekday format.

The Weekend Format

Introduction

Commonly scheduling or formatting classes for nontraditional students is an issue important for participants of conferences such as the Nontraditional/Interdisciplinary Programs Conference. Last year at the 9th Annual Conference a study was presented on Faculty Perceptions of the Weekend Format for Graduate Students (Dendinger). This year a follow up study is being presented with student perceptions of the same format. Much of what was presented in the first study will be shared in this paper with student perceptions added, rounding out a rather complete assessment of the weekend format.

Description/Definition

A precise definition of the weekend format is not possible applicable to all programs. It has been developed in various ways depending on the needs of the students and institution involved. For purposes of the study, the weekend format is defined as Friday evening from 7:00 P.M. until 10:00 P.M. and all day Saturday,

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beginning at 8:30 A.M. and concluding at 4:30 P.M. However, in the literature pertaining to the weekend formats several other formats appear. Some go longer on Friday evening. Others include some time on Sunday. Regardless of the specific schedule set, the weekend format suggests some concentrated hours during the weekend, be it Friday, Saturday or Sunday, in place of the traditional weekday session between 8:00 A.M. and 5:00 P.M. It also differs from the less traditional but rather common evening class format.

The weekend format is nontraditional. It accommodates students who cannot fit into the traditional format either because of work schedule or commuting distance. However, other factors contribute such as the need for a spouse to provide child care. Whatever the reason, it has provided a format for nontraditional students who cannot fit into the traditional schedule, designed for full-time, traditionally aged students.

Review of the Literature

Last year, as mentioned earlier, faculty perceptions were presented and analyzed (Dendinger). An evening class format for nontraditional students was also on the program at this conference last year (Fox, Blystone and Lucy). Many more have appeared as part of this conference throughout the years. Rollyson shared the Wayne State University experience with the weekend conference. This concentrated two-day session for nontraditional students is part of their continuing education college. Excellent suggestions were offered regarding the weekend experience, dealing with the challenges and limitations of this schedule. Generally, it was presented as an opportunity for adult learners, comparable to the quality of the weekday sessions (Rollyson).

The Colleges of St. Thomas and St. Catherine developed an entire Bachelor's in Social Work program delivered within the weekend format. This effort had to meet the requirements of the Council on Social Work Education in addition to the usual assessments demanded of any college or university (Shank and Brenden).

Nazareth College in Kalamazoo, Michigan, has also provided a unique master's program for nontraditional students. This program was presented by Woodin, arguing for not only the integrity of the learning process, but the soundness of the program financially as well (Woodin). Goldberg addressed obstacles encountered in the weekend format by reviewing the experience of Trinity College in Washington, D.C. (Goldberg).

A final study was selected for its focus on the assessment of the weekend format. Dorsey and Pierson presented extensive data regarding nontraditional formatting, which included the weekend format. They suggest that the nontraditional schedule needs close scrutiny because of its experimental nature. Interestingly, they suggest that their data support the nontraditional format more strongly than data on traditional formatting, simply because the traditional assessments have been sparse at best (Dorsey and Pierson).

Certainly, the weekend format has been addressed seriously in these nine annual conferences. Not surprisingly, they have been presented in a rather favorable light. However, there is credibility since some of the programs have had respectable assessments done, and others have been balanced in presenting the strengths, challenges, and limitations of this format.

The University of Nebraska at Omaha - A Case Example

More than a decade ago, faculty at the University of Nebraska Graduate School of Social Work realized the obstacles students encountered in getting a degree. Long distance commuting was one obvious challenge. Since this graduate program is one of a kind in a multi-state area, stretching from Iowa City on the east, to Fort Collins, Colorado, on the west, some 800 miles, it is not uncommon to have students commuting from three to six hours one way to attend class. Obviously, if they could reduce their trips from 16 to 4, by way of weekend classes, over the traditional once-per-week format, considerable time, energy, and money would be saved.

Another impediment to weekday class attendance was the full-time job, even if the student lived in the same city as the university. Thus, some relief from having all the classes during the weekday would cut down on taking annual leave and comp time.

Slowly, but with greater frequency, and with greater numbers of courses, the faculty offered courses on weekends. At this point over 1,000 students have taken graduate social work courses on weekends. The courses offered have been advanced research, supervision, advanced group work, foundation practice, and advanced practice courses. The limitation on the course offerings has been more of a factor of faculty interest than any judgment that this or that course could not be offered in the weekend format.

Faculty Perceptions

The Graduate School of Social Work at the University of Nebraska at Omaha has offered courses in the weekend format for the past ten years. The full- and part-time faculty at this institution were surveyed regarding their perceptions of these courses offered in the nontraditional format for graduate students. Twenty-six of the faculty responded to the survey out of a population of 26. Of these, 17 were full-time and 9 were part-time. Thirteen were tenured faculty while the other 13 were not. Ten described themselves as micro oriented, 6 were macro, and 5 generic in their teaching responsibilities. The average number of years teaching was 10.8. Eleven of the 26 had taught in the weekend format (See Faculty Survey).

Courses have been offered in this format 40 different times, with ten different courses being offered. The average number of students in each course was 23.5, with a total of 940 students taught. By far, three courses constitute the bulk of the experience. These three include the advanced micro practice course, the advanced group work practice course, and the social work supervision course. These three courses account for approximately 800 of the 940 students taught in this format over the past ten years.

Five questions were directed at the faculty to determine their perceptions of the weekend format. The first item sought the assessment of those faculty who had taught in the weekend format. They were simply asked if students in their weekend course learned more, about the same, or less than students taught in the traditional format. These faculty strongly or very strongly agreed that the students learned as much or more than in other formats. Eight of the eleven respondents were in this group while three of the eleven perceived students as learning less.

Faculty in general were asked the same question, even though they may not have taught in this format. This larger group responded similarly with 13 agreeing that students taught in the weekend format learned the same or more, and 5 believed they learned less.

There was strong agreement that convenience for the long distance commuter and work schedules directed the rationale for the weekend format. Twenty-two of the faculty perceived this while only two disagreed. When enhancing the learning environment was proposed, the response was about evenly divided. Nine did think that it enhanced the learning environment while eleven disagreed with this notion.

Regardless of the rationale for the weekend format, faculty were clear in their support of this format in regard to quality of teaching standards. Therefore, only 4 thought the standards were reduced in this type of teaching, while 17 agreed or strongly agreed that standards were not scaled down.

Finally, in regard to a willingness to teach on weekends, surprisingly, only 5 said they would not. Seventeen were rather clear that they would consider this schedule.

At the end of this survey faculty were asked to identify courses which they would exclude from this format. There was no clear pattern of courses which emerged. A couple of the faculty were quite opposed to this format in general and would exclude most if not all courses in this time frame. However, generally, faculty did not single out any set of courses with any consensus. Faculty who lectured extensively and courses demanding a great deal of outside work were mentioned as likely courses for exclusion. However, this would depend more on faculty style rather than the course itself.

Faculty were also asked to identify courses likely to be appropriate for the weekend format. Again, no clear pattern emerged. However, there seemed to be good support for the courses routinely offered. As mentioned earlier, these were the advance micro practice courses and the social work supervision course. Again, some faculty urged no course be taught in this way, while others suggested most if not all the courses could be taught effectively in this format.

Student Perceptions

In addition to faculty perceptions, student perceptions of the weekend format were gathered as well. This student study of perceptions was accomplished by using the official student evaluation of teaching. Nineteen sections were examined, 8 of which were the weekend format and 11 were the traditional weekday format. The instructor was the same for all sections. A total of 194 students were in the weekend format, while 191 were in the traditional classes. Thus, class sizes were considerably larger in the weekend format, due to the greater demand for this format. Class size for the weekend format was 24.25 while the size of the traditional format was 17.36.

The key question was the teaching itself. The response to this question resulted in a mean score of 1.26 for the weekend class. (This was a 5 point scale with 1 being the highest.) The traditional format scored a mean of 1.39. Thus, if one were to hypothesize that, according to student perceptions, the weekend format teaching was equal to or better than teaching in the traditional format, this hypothesis was affirmed. Using the t test (t = 2.2), this difference was significant at the p = .037 level.

With the exception of "grading fairly," all the items were rated more highly in the weekend format than they were in the traditional format. The "grading fairly" statement was so equally rated that the difference was not significant.

Upon further analysis it is remarkable that the weekend format fares as well as it does, in fact better than the traditional format. It has 7 more students per class. It has routinely been scheduled over Mother's Day, Memorial Day and Father's Day weekends. Given the larger class size, and the other obstacles, one might speculate that it would be rated lower than the traditional format. This has not been the case. Therefore, such factors as the ability to form a more cohesive group, the enthusiasm of the instructor, and the climate for creative thinking can be offered as a rationale for the positive student ratings. When it is recalled that this is the same instructor, using the same materials, with the same overall approach, there is a strong message that this weekend format is ideally suited to nontraditional, graduate students in social work.

As mentioned earlier, the overall teaching was significantly better in the weekend format. The t test was used on the seven other items as well. Three of the seven items proved to be significantly better at the .05 level. The instructor's "stimulating thinking" was significantly better (t = 2.7) at the p = .015 level. "Clarifying subject matter" was also better (t = 2.6) at the p = .019 level. Finally, "assigning materials for effective learning" was significantly better (t = 2.1) at the p = .048 level. The other 4 items did not demonstrate any significant difference.

Summary and Conclusion

This study was an attempt to assess faculty and student perceptions of the weekend format for graduate students. Fortunately, there have been a number of presentations at the Nontraditional/Interdisciplinary Programs Conferences related to this format. From a review of that literature, it was clear from at least six programs, the format itself was positively perceived by faculty. Although some limitations were discussed, in no case did any institution believe the format itself resulted in scaled down standards for students.

With those studies in mind, the faculty of the University of Nebraska at Omaha Graduate School of Social Work were surveyed regarding their experience. This institution also generally applauded efforts at providing courses during the weekend format. Again, there are limitations from the perspective of faculty, but generally it is viewed as a quality experience for graduate students, comparable to the traditional format.

When student perceptions were assessed and compared, the weekend format rated higher than the traditional format. From all data available at this point, it is safe to suggest that the weekend format can equal or exceed teaching in the traditional format for graduate students.

This conference has provided an excellent opportunity to share nontraditional formatting for students who may not have access to higher education in the traditional format. The weekend format is one example of the experiences shared over the years at this conference. To date, with the programs presented, one can be confident that the weekend format not only provides access, but quality education as well.

The Weekend Format for Graduate Students:
Faculty Perceptions

Faculty Status: Full time _17_ Part time _9_ Tenure _13_ Micro _10_ Macro _6_ Generic _5_ (Check all that apply)

Number of years teaching Social Work courses _10.8_

Have you taught a weekend course? Yes _11_ No _15_

If so, which one(s)? Advanced Micro Practices and Supervision

How many times have you taught a weekend course? _40_

If you have taught a weekend course, what was the average number of students in the class? _23.5_

Estimate the total number of students you have taught in the weekend format _940_

Overall, do you think that the students taught in the weekend format have learned more
_5_, about the same _8_, less _5_ than students taught in the traditional format?

Convenience of long distance commuters and work schedules are the major reasons for offering the weekend format for graduate students.
Strongly agree Strongly disagree
(Number of respondents in parenthesis)
1(13) 2(9) 3(1) 4 5(2)

Enhancing the learning environment is a major reason for offering classes in the weekend format.
1(4) 2(5) 3(4) 4(9) 5(2)

Although desirable or even necessary for our student population, I think offering the weekend format is scaling down our standards for graduate school performance.
1(1) 2(3) 3(4) 4(9) 5(8)

If asked, I would teach a course in the weekend format.
1(11) 2(6) 3(3) 4(1) 5(4)

List courses you would excluded from the weekend format.

List courses you think are appropriate for the weekend format.

STUDENT EVALUATION OF TEACHING

Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
1	2	3	4	5

	Summer	Fall Spring	Total	t value	p value
The instructor stimulated thinking	1.22	1.48	1.37	2.7	.015*
The instructor was enthusiastic about the subject matter	1.02	1.10	1.06	1.8	.088
The instructor was responsive to student questions	1.11	1.16	1.14	1.3	.20
The instructor was well prepared for class	1.03	1.16	1.11	1.9	.081
The instructor had the ability to explain/ clarify the subject material	1.10	1.24	1.18	2.6	.019*
The instructor graded fairly	1.25	1.23	1.24	-.01	.990
The instructor assigned materials effective for learning	1.26	1.50	1.40	2.1	.048*
Overall how do you rate the teaching in this course: 1=superior, 2=above average, 3=average, 4=below average, 5=unsatisfactory	1.23	1.39	1.32	2.26	.037*

	Sections	Class Size	Total
Summer	8	24.25	194
Fall/Spring	11	17.36	191

*Significant at the .05 level

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THE LEARNING SPIRAL: AN AID TO INFORMATION RETENTION

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Accelerated degree completion programs offer the ideal solution for many returning adult students. Yet such programs may not be the most ideal way to gain and retain knowledge. This paper will examine how one institution employed a series of techniques, collectively known as "the learning spiral," in the design and implementation of a four-year accelerated degree program in order to help students succeed with their studies.

Introduction

In 1989, Pacific Bell approached some 90 universities and colleges with which it had associations and asked them develop an in-house undergraduate degree program for their employees. The program would be delivered over the course of about four years to any of the company's employees who wished to further their education.

The adult education arm of the University of Redlands (U of R), the Alfred North Whitehead Center (ANWC), was one of two institutions that took up the challenge and developed a program. For ANWC, development of a four-year program would mean exploring new territory, because up until that point it had only offered two-year degree completion programs at the undergraduate level. While

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many of the challenges involved in designing a new program are political in nature (Dinmore et al, 1991), others arise from the demands that living and working make upon the adult learner. Courses at ANWC are based upon the Carnegie unit (Ryberg, Dinmore and Murray, 1992) and are typically of six weeks duration. Can one really expect working adults to maintain their initial high level of motivation for four years in the face of the demands of an accelerated program? How do the program designers deal with the question of "time for reflection", and avoid student burnout? These questions, and others, have an impact upon how well students retain the information that they have gained.

In summary, Pacific Bell needed a specific adult education program and ANWC had experience in adult education. Their need, however, was for a four-year program and our experience was in two-year completion programs. We would have to re-think our philosophy of adult education unless we wished to find ourselves in the kind of *laissez-faire* approach to the needs of adult learners identified by Ackell et al (1982), where the system works neither for nor against them.

Identifying the Problem

In 1989, when ANWC began to develop the four-year Connections program for Pacific Bell, the college had had 13 years of experience teaching adult students both at the undergraduate and graduate levels. Although ANWC offered a variety of undergraduate degrees, all were considered to be completion programs. Courses offered were at the upper division level, and the programs, lasting some two years, were delivered as majors in the various fields. In order to gain admission to the programs, amongst other criteria, students had to have acquired 40 or more units of transferable college units and a minimum of five years of work experience.

Preliminary discussions with Telesis Management Institute (TMI), the education arm of Pacific Bell (confirmed later by analysis of applications from prospective students) revealed that students entering the Connections program would have a very different academic preparation from those in the existing two-year program. Next to none would possess the academic qualifications demanded of students entering the four-year residential program directly out of high school. As Holtzclaw (1988) indicated, admissions standards would have to be flexible--few indeed would possess the 2.65 recalculated GPA demanded of students entering out of high school. The learner's experience and motivation have long been recognized (Lindeman, 1926) as being more accurate predictors of success for adult learners than such contemporary predictors as SAT or ACT scores, particularly when achieved some time back. These criteria are already recognized in admission standards for the two-year program, but a successful four-year program would certainly need to reexamine and possibly modify these criteria.

Another dimension in the program design was responding to the wishes of the corporation and the students themselves, many of whom had been working for Pacific Bell for 20 or more years. Such adults are pragmatists who wish to make their life and experiences count: ". . . the resource of highest value in adult education is the learner's experience. If education is life, then life is also education" (Lindeman, 1926, p. 9). In a time of recession and corporate down-sizing, the University and all interested parties felt it was essential to develop a degree that would make the students and the corporation more competitive.

This impression was reinforced later by student feedback. In Pacific Bell's workforce, only 34% of managers had degrees, and a mere 11% of the total had earned an undergraduate degree, even though Pacific Bell would offer full tuition reimbursement to students studying for an undergraduate degree in any discipline in order to improve those percentages. The two universities responding to Pacific Bell's challenge developed degrees in fields related to the corporation's operations: business and management, and telecommunications. A professionally educated workforce would certainly make the corporation more competitive.

As the faculty of ANWC sat down to develop the program, they realized that many of the traditional program designs would be ineffective in the new context. TMI told faculty they were moving away from community college programs for a number of reasons among which was the fact that their employees were discouraged by the seemingly slow rate of progress. In one instance, a "Gateway" program consisting mainly of remediation in mathematics and English lasted nine months, and required students to attend four nights per week. Such programs had acquired the dubious name of "killer college"! The paradox is potentially that noted by Ryberg, Dinmore and Murray (1992)--while individual courses in accelerated degree programs cover given course material in less time than non-accelerated programs, the degrees themselves can take longer to complete.

Although faculty were given complete freedom to design an appropriate program, it became clear that they had to work within certain physical parameters: the program would be delivered at the students' work site; students could not reasonably be expected to attend class more than two nights per week, and one night per week was preferable; students were also very vocal in their requests for a program that would take as close as possible to four years to complete.

With regard to the last point, all parties involved--from WASC (U of R's accrediting agency), through U of R's traditional faculty, ANWC's faculty, the corporation, and the students themselves--wanted the experience of the corporate student to be comparable to that of the 17-23-year-old students on campus. While these requirements presented considerable challenges, they were not insuperable.

Some Features of the Two-Year Program

The existing two-year programs are 39 to 45 units in length, depending upon the major. They contain an introductory humanities/social science (portfolio) course that serves the dual function of adding diversity to the program, and permitting those who need them the ability to pick up additional units of credit by challenging University courses on the basis of experiential learning. The portfolio element of this course is very close to that described by Lujan (1991). In addition to course work, students are expected to complete a senior project that integrates diverse aspects of their program.

Although the number of units that students transfer in has been dropping in recent years, the majority of students would graduate upon completion of the major program on the basis of the number of units transferred in, with the addition of units gained through the portfolio process. Those requiring additional units could pick them up through a variety of options. Past surveys, as recently as 1986, had revealed that the overwhelming majority of students entering the two-year degree program had already completed general education requirements and thus there were no general education requirements included in this program.

Combatting the "Same Old Stuff" Syndrome

As faculty began to design the Connections program, they realized that they would not be able simply to adapt the existing upper division major (the two-year program) by adding a lower division general education portion to it. For one thing, the existing program was a mere 39 units, and that would leave a lower division phase of 81 units to be completed in around two years. For another thing, WASC standards require that general education courses be interspersed between the lower and upper divisions.

Although there was never any formal recognition of the title, the approach that faculty took in designing the Connections program might be described as a "learning spiral." In a fashion similar to the Socratic method, the learning spiral builds upon the students' experience, working from the known to the unknown. But the learning spiral incorporates a number of different techniques to help students retain the knowledge they have gained. We might define the learning spiral as a method that introduces a reinforcer subsequent to the introduction of new material. The reinforcer may be: immediate or delayed; a practical application of theory; an application of the original concepts and ideas in a different subject area, and at a more advanced level.

A first stage in the process of development was creation of an underlying theme for the program. Utilizing the notion of "Work in America" meant that course designers could make learning relevant to the working adult learner. Thus, the introductory refresher course (ADMS) taken prior to matriculation might incorporate mathematical problems that students would meet in the workplace. For example, students might be asked to work out how much carpet would be needed to cover the floor of an office, or to calculate the length of chain link fence required to fence off a parking lot. In an art course students might be asked to examine the architecture that surrounds them, and the art that their employer utilizes in public spaces. Yet another example is furnished by the science courses built into the program. In view of the difficulty of providing laboratory type classes, and also in order to make the courses applicable to students' experience, environmental science courses that asked students to examine their responsibilities towards the environment, as well the connection between environmental and technological issues, were developed. By this means, students gain an appreciation that learning is not merely a sterile phenomenon but an active part of their environment.

In all of these courses, students are actively involved in the learning process. Rather than having teachers who lecture, faculty facilitate students' active learning. Just as they might in the work setting, students are encouraged to work together on projects. Co-operative, rather than competitive learning is stressed as a means of knowledge acquisition and retention.

Field studies were an integral part of the original design of the program. These two unit courses spread over the length of what was initially a fifteen-week semester enable students to apply theories learned in the classroom in a practical way. For example, in the first course after entry into the program, students learn about several major theories of human nature. Such theories are not necessarily easy to comprehend particularly after an absence from the classroom of more than 20 years. Students "volunteer" to perform community service and through a process of journal writing, essay writing and periodic contacts with faculty over some 22 weeks (the semester length was subsequently extended) come to understand how the theories of Marx, Freud, Skinner, Plato, and Christianity can have a direct application in an everyday setting. Field study courses are time intensive, and so it is with regret that ANWC has reduced their number from five to three over the four-year program.

A central feature of the learning spiral is the notion that where possible, students apply the knowledge they have acquired. This is accomplished in a number of ways that encourage the practical application of theory. Among these ways are: faculty willingness and flexibility to use work situations in the classroom; journals; field study courses; partnership courses; thematic sequences of courses; and the notion of the inter-related nature of knowledge. Many of these methods are well known; it is the emphasis upon using all of them in a systematic fashion that leads to the effectiveness of the learning spiral.

The Connections program has also integrated Partnership courses as part of the learning spiral. In these courses, students integrate theory and practice in a different way. The "partnership" element derives from the fact that the concept involves combining University-generated theoretical elements at the beginning and end of the course with a central, practical, element derived from the corporation's training programs. In one such course, a non-accelerated computer literacy course covering a range of computer uses, U of R faculty offer theory segments. These are coupled with "hands on" problem-solving sessions that allow students to become familiar with the computer and its uses. As a means of assessing outcomes, students are required to perform a series of tasks that demonstrate understanding of DOS, word processing and spreadsheets.

In both field study- and partnership courses, implementation of the effects of the learning spiral is immediate. It is when there is a delay in the reinforcing element, however, that the learning spiral achieves a greater effect. Such delays can be created by a variety of means, but the Connections program uses at least two.

The first method is a thematic approach. As the program was initially developed, semesters were planned around a central idea. Starting with an examination of self, the areas of study expanded semester by semester to include an ever-widening sphere of inquiry: self and family; self and the work place; self and society; self and the world. Each 15-week semester would reinforce, and expand upon, the information gained in prior semesters. Such reinforcement is both within the same discipline and cross-disciplinary, as is reflected in the title of the program, "Connections."

The second method of delayed reinforcement is course sequencing. The acquisition of certain knowledge or skills forms the basis for subsequent learning. These are conceptual building blocks that form the context for later theory building and analysis. Advanced learning spirals back to analysis of this foundation with greater insight into its context and the student demonstrates more potential for transference of learning.

Course sequencing can also be used for anxiety management and student motivation. Adult students who have been out of school for a long time, who emphasized non-academic pursuits or who had a bad school experience, benefit from course sequencing that is sensitive to their needs. Many students continue to be mathphobic and may continue to need systematic and positive reinforcement.

Initial assumptions about the academic preparation of students entering the program had to be modified. Sequencing responsive to student needs brought about changes in sequencing using the thematic approach described above. For example, design-stage input that students taking the pre-matriculation course (Academic Decision-Making Seminar [ADMS]) would need the mathematical element only as a refresher was largely incorrect. The math portion focused upon arithmetic, algebra and geometry, but to faculty's surprise, a substantial proportion of the classes had had little or no geometry. When the classes came to the next math course in the cycle (finite math) eight months later, many of those who had been able to demonstrate competency earlier at the required level, had "lost" most of their ability. This was a substantial demotivator for students who continued to be somewhat vulnerable and generally math phobic. Faculty have redesigned the ADMS mathematics syllabus and the second math class is scheduled a couple of months earlier. In addition, the finite math course now has a more clearly defined focus on mathematics for business. The subsequent mathematics course has also been refocused and rescheduled in the light of our experience.

Problem Areas

Modifications to the program have been a mixed blessing. While faculty realized from the outset that they would need to be flexible, that very flexibility has had both a positive and a negative impact upon the learning spiral.

Design of the Connections program was undertaken initially by a small group of ANWC faculty and the Dean of the Center. As time passed, others assumed responsibility for the design process, and the original rationale for the design was either forgotten, or required change. The original concept of a program containing 15-week semesters built around a common theme began to erode in the face of the need to resequence courses. The underlying theme, "Work in America", however, remains unchanged and appears to be reinforced, although it is not universally recognized.

Although those working on the program at the outset informally discussed the concept of the learning spiral, there was never any formal recognition of it as a design concept. Within a rapidly changing environment, this has meant inevitably that some elements have been lost in the face of other, more pressing needs. There has been some pressure from more conservative faculty elements to make the program a rather more traditional one. To do so, however, would remove many of the elements that make the program, as it now exists, so attractive to the students, and to the corporation.

ANWC has been forced to cut back on both field study- and partnership courses for reasons of pragmatism. We may eventually resurrect them for their value in reinforcing knowledge. Field studies are labor intensive, and that weighs heavily in an accelerated program. We have reduced their number from five to three. Partnership courses are also a valuable element of the learning spiral, but because of cooperation and delivery problems we have reduced the number of courses from six to two. Initial plans to permit the employees to attend these courses on a day-release basis had to be dropped in the face of union opposition. The resultant backing up of those courses into the evening schedule has had a far-reaching impact upon scheduling.

Conclusions

The learning spiral is a technique that permits students to reinforce and retain knowledge by revisiting material and examining it from a variety of different perspectives. Recognizing that adults' orientation to learning is life-centered, ANWC has endeavored to develop a corporate program that reinforces theory with practical application. This is achieved in a number of ways.

While ANWC has departed from many of its original ideas in developing the Connections program, the original, underlying--if sometimes unspoken--idea of a learning spiral remains a valuable aid in the retention of knowledge for adults involved in an accelerated, four-year degree program.

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RETURNING STUDENTS: HELPING WOMEN IN TRANSITION

Kathryn V. Fitzgibbons

The transition under consideration in this study was that of adult women returning to continue their postsecondary education. Exploration of this transition using Schlossberg's integrative Process and Content Model (1981) was employed. The sample for this investigation was comprised of women who were pursuing graduate degrees on a part-time basis while maintaining full-time employment. Five major themes of adulthood were evinced. Schlossberg's model offers a valuable framework for enhancing the understanding and knowledge necessary for helping women cope more effectively with the stress that accompanies their transition back into the university.

Analyzing human adaptation to transition (Schlossberg 1989, 1984, 1981) when considering needs of women who exemplify the "blended life plan" described by K. Patricia Cross (1981) -- concurrently in roles of wife, part-time graduate student, homemaker, full-time paid employee -- has provided an illuminating framework for determining intervention strategies.

Reaching its peak in 1981, the traditional college population [aged 18-22, full-time day student on campus whose primary responsibility is study (ACE 1984)] has declined, and a different population of students has emerged. The profile of the nontraditional student [characterized by a combination of roles and responsibilities typically associated with adulthood (ACE 1984)] is that of a white adult, part-time, returning student; highly motivated, achievement-oriented, with some college background (a college graduate is more than twice as likely as a nongraduate to be a participant in continuing education); upwardly mobile and relatively privileged (Apps, 1980; Cross, 1983). This nontraditional student population is projected to comprise up to 50% of college enrollments in the 1990's (*CHE* 1988). With little exception, subjects in this study shared this profile.

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Increases in the number of adults returning to continue their education can be understood in terms of socio-economic and political changes. The post-World War II "baby boom" cohort, well-educated during the sixties, was impacted by "revolutions" for greater equality of opportunity that characterized a decade. Living in a rapidly changing and complex technological society has required job retraining, as well as initial training.

Furthermore, in analyzing demographic changes that affect higher education enrollments, medical advances that have increased lifespan and resultant leisure time for the elderly must not be overlooked. Inherent to a dynamic culture is stress with which individuals must learn to cope (Charlesworth, 1985). Of central concern in this study was the demand of change upon women, which led to their re-entry into the worlds of work and education.

Both the acceptance of declining traditional roles for women and the emergence of new roles for women help explain the demand for continuing education opportunities. Social and technological developments have affected roles of women in our society. Divorce rates have increased; the number of children per family has decreased, with children entering school earlier and staying longer. A technology of labor-saving devices and appliances have impacted the homemaker's role. Economic pressures have pushed -- and educational opportunities have pulled -- women into the labor market. With the feminist movement of the 1960's, the trend of women working swelled, exploding in the 1970's. In 1977, the U. S. Bureau of the Census reported that 55% of all wives and mothers worked outside the home. "Displaced homeworkers" and "reentry women" are a social phenomenon (Cross, 1981). The National Center for Educational Brokering reported that 50%-70% of all clients seeking counseling information regarding career and educational opportunities were displaced homemakers. In "Women at Midlife" Siegel (1982) likewise reports a substantial number of displaced homemakers among those in her sample experiencing the transition of return to school in middle age. Whether it be to enhance qualification for job re-entry, career development, or self-enrichment, continuing education presents a significant transition in the lives of women, one that challenges higher education.

Developed by Nancy Schlossberg (1981), her Process and Content Model provides a dynamic, non-judgmental framework for helping adults in transition. This framework emphasizes that normal adults (such as my subjects) face inevitable but oftentimes unpredictable transitions throughout life (Schlossberg, 1987, 1981). According to Schlossberg, "A transition can be said to occur if an event or non-event results in a change in assumptions about oneself and the world, and thus requires a corresponding change in one's behavior and relationships" (1981, p.6). For each of the females interviewed for this study, the return to school represented a transition. Because such transition upsets one's existing balance, alteration or abandonment of one set of assumptions for another creates a tension and/or stress for which helping intervention(s) may be in order (Everly, 1987). Because periods of transition present opportunities for psychological growth or psychological deterioration, skillful helping can be of critical importance for individuals.

In assessing the appropriateness of intervention strategies for individuals (represented by the subjects in this study), the state of transition required examination. The opportunity to explore the transition was essential. Following such exploration, decisions were made on the applicability and dimensions of any helping interventions. The scope of this research was limited to such considerations. Using the set of variables posited in the Schlossberg model (discussed below) proved a successful means for proceeding with this investigation.

Unlike many women who are thrust into academe (because of employer demands, divorce, bereavement, etc.) the females participating in this investigation were all involved in a planned, gradual transition. Each subject indicated that she had spent a long time planning for a return to the university, exploring options, and finally making a decision. Sonia waited until her children were older and more self-sufficient; Maggie postponed the return to school until after her new role as wife was comfortable. Thus, preparation or "rehearsal" for adding a future role as returning student occurred. None of the women in this study could identify an event or non-event that "triggered" their decision to pursue their formal education. Indeed, nothing illustrated Levinson's marker event (1978). Although not specifically a non-event, Joy, Sonia, and Judi spoke to the issue of feeling underemployed, holding jobs that lacked challenge, and offered no opportunity for meaningful promotion. In those terms, a rewarding career was the non-event that led to reassessment and the decision to complete a graduate degree program.

In addition to the advantage of a gradual, planned transition, these participants also expressed strongly their belief that their decision to continue their education was an independent one. The women were positive about having an increased degree of control in their lives. Although each of the women perceived an internal locus of control (Rotter, 1966) on this issue, Judi's response merits further consideration. It was her decision to earn a Master's degree in Library Science, but she reported feeling tremendous pressure to do so from her family and peers. More than any subject, Judi felt the need to prove herself, not only to herself, but very much for others. She seemed unaware of the extent to which she was indicating an external locus of control; this well may be the most important factor in understanding why the transition for Judi was the most difficult of any in the group.

Whether or not an individual views her/himself as off-time or on-time (Neugarten, 1969) serves as an important indicator of the ease of adaption to transition. For some women, pressure that time is running out determines their choices. When deciding whether or not to enroll in a graduate degree program, the distance perceived between themselves and traditionally aged college students may lead to feelings of being age-deviant. Those interviewed in this study would support Neugarten's position that the issue of timing and the social clock were less defined as we "move toward an 'age irrelevant' society in which more people of all ages engage in activities formerly reserved to one age group" (Schlossberg 1981, p. 9). Perhaps subjects were merely giving lip service to "age irrelevancy", but none expressed that she was too old or that it was too late (although Maggie and Judi wished they had returned to graduate studies earlier); none sensed a "chilly climate." In fact, subjects were in classes that included a significant percentage of returning students. Only Joy expressed an awareness that teaching assistants and part-time instructors, rather that full-time faculty, of the university were teaching a majority of her courses: is the adult part-time student "second class"?

In accepting the role of student, all of the interviewees agreed that this was a gain. In terms of the stimulation, self-improvement, desire to learn, etc., returning to the university was a positive gain. While many women achieve vicariously through others, these women were defining their identities through personal achievement. Joy spoke most directly to this point. Seeing that her husband, a newspaper reporter, enjoyed his work, she was motivated to develop her own career potential so that such rewards could be available for her. Likewise, Maggie expressed that in her role as teacher she was always giving to others. With strengthened identity, Maggie began to fulfill her own need for intellectual challenge and achievement by pursuing her doctorate on a part-time basis.

Guided by the Content and Process Model, issues of competency also played a part in assessing this transition as a positive role gain. Judi and Maggie were unsure of their abilities to achieve at the graduate level. However, after completing three semesters, each overcame her initial lack of confidence. Sonia articulated this sense most clearly: in achieving her goals, she was feeling more confident emotionally. Indeed, these subjects provided support for Robert White's view that, for many, the return to school is to increase one's feeling of competence.

Nevertheless, any role change, whether positive or negative, involves some degree of stress. To be sure, this sample, despite feeling that their return to school was positive, all spoke to the stress they were experiencing, particularly stress due to time pressures. Except for Rosetta, all are suffering from headaches, stomach aches, disturbed sleep, and weight loss and/or gain. Joy and Sonia seemed very much in control and spoke very rationally about setting priorities when time was limited. However, Sonia later disclosed that she arose at 4:30 am to study and to prepare breakfast for her family -- as she did before her return to university study. And Joy, who compromised on house-cleaning, has invited no guest to her now "unpresentable" home. "We need to examine gender issues and the politics of housework" points out *Improving Higher Education Environments for Adults* (Schlossberg, Lynch, and Chickering, 1989, p.91). Any sharing of traditional role duties was not evinced in this study.

Compatible with the Schlossberg model, Lowenthal's research indicates the importance of support groups in helping an individual cope with the stress of transition. During interviews conducted for this study, the critical role of intimate relationships, friendships, and institutional accommodation was evident. These subjects had few institutional barriers to overcome. Tuition remission plans, supportive supervisors, flexible work schedules, counseling availability, acceptable registration procedures, and geographic location were in place.

Two of the case studies (Rosetta and Judi) most dramatically underscored the importance of support groups. Rosetta had adapted most successfully to her return to school, and she was best able to cope with concomitant demands. Much of her success can be attributed to the remarkably strong support she received from her parents, friends, co-workers, and children. When compared with the other women in this sample, Rosetta may be seen to be in the least fortunate situation -- black, divorced, two children, annual income less than $14,000. Yet, she expressed the strongest internal locus of control and was both aware and proud of the fact that she provides an inspiring role model. Her mother recently studied and received her GED. Friends followed Rosetta's example, and overcame motivational barriers that had kept them from further education. Co-workers cheered Rosetta's accomplishments; her children were proud of their mother. On the other hand, Judi -- white, married, without children -- is making a difficult adjustment. Earlier it was noted that Judi revealed a strong external locus of control. She perceived support from her husband only. Her family wavered between support for her academic involvement and exhortations for a more traditional lifestyle. Judi's friends imposed on her to participate in activities, not understanding her limited time for recreation. And lastly, reactions from her co-workers are mixed; some are supportive, others feel jealous and threatened.

Based on the brief and limited interviews conducted, the work of Everly (1987) and Lazarus (1981) enhanced understanding of the concurrent stress these women were experiencing. Rather than dramatic life events, it appeared to be more of the daily hassles that frustrated and distressed this sample of female returning students. Not enough time. Subjects cited housekeeping/home maintenance and unreliable transportation as examples of stressing daily occurrences. Lazarus, concluding with a caveat not to overgeneralize, asserts that everyday "uplifts" are not an antidote to everyday "hassles."

Utilizing Schlossberg's model to explore women's adaptation to transition (returning students) has provided and effective means for understanding. Five major themes of adulthood -- role change, stock-taking, shift in time perspective, locus of control, and stress -- were predominant. Each of the women interviewed was struggling to define and shape her own identity; each valued intimacy; each desired more time/energy for interpersonal relationships. These women spoke the issues of generativity and competency -- all are plateaued employees seeking alternatives for growth and development. Intervention strategies can be developed to assist women in coping more effectively with the inevitable stress that accompanies their transition back into the university. Modifying institutional policies and practices in ways that will extend educational assistance to returning students offers meaningful challenge and reward.

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PREPARING NON-ACCESS ADULTS FOR MIDDLE CLASS JOBS OF THE FUTURE: A COMMUNITY-CORPORATE-UNIVERSITY PARTNERSHIP

Edward J. Harris

The field of logistics has the potential to provide middle class jobs of the future for persons with a high school education. The School for New Learning of DePaul University is developing a project to enable young minority men and women in the Chicago area to successfully enter the growing field of logistics. The School for New Learning, together with an urban economic research institute, a set of companies involved in logistics, and a group of community organizations, will plan and implement this complex and socially important effort. This paper describes the scope and design of the project, and poses questions for practitioner researchers.

Introduction

With the globalization of the economies of this planet, profound economic shifts with potentially devastating social consequences are taking place. Microchip technologies enable services and information to leap national boundaries without so much as a "how de do." People move more freely and production locations change. We see more and more production of goods shifting to low wage areas of the world with the industrialized nations left specializing in knowledge and service work. Satellite communication allows globally dispersed commercial activities to be integrated into one company under one CEO with a single Long Range Plan.

Peter Drucker writes that:

> the single greatest challenge facing managers in the developed countries of the world is to raise the productivity of knowledge and service workers . . . . The chief **economic** priority for developed countries . . . must be to raise the productivity of knowledge and service work . . . .

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> The most pressing **social** challenge developed countries face, however, will be to raise the productivity of service work. Unless this challenge is met, the developed world will face increasing social tensions, increasing polarization, increasing radicalization, possibly even class war.[1]

Analysis of the Problem

Following the trend in this country, Illinois lost 23% of its manufacturing jobs in the period 1980-86. At the same time there was a 20% increase in non-manufacturing (knowledge and service sector) employment. By the year 2000 service industries are expected to provide 1/3 of all jobs in the state and over 40% of all new jobs available.

In the Chicago metropolitan area one sees the same trend. There was a decline in the share of employment in the metropolitan area held by Chicago/Cook County and gains in the "collar" communities, especially DuPage and McHenry counties to the north and west. This trend illustrates the continuing loss of good blue collar jobs in the city of Chicago, jobs which supported middle class families. The result is a shrinking number of families with middle class incomes, and a growing gap between persons with better training/higher incomes and the underclass.

The Plan

So what is to be done? An analysis of occupational trends in the Chicago area by NCI Institute for Urban Economic Development suggests that there are jobs in some sectors which can be entered with only a high school diploma for which potential for promotion and middle class salaries exist. These may be the replacements for the permanently lost manufacturing jobs. For example, the field of logistics (transportation, distribution and wholesale trade) and the allied health professions show great promise of providing just such opportunity.

In the transportation/logistics field, entry level jobs (clerical, dockman, order picker, inventory clerk, etc.) are available with no more than a high school diploma. Drivers of larger trucks in interstate commerce require more specialized training, new federally mandated licenses, and experience.

This project directly addresses the **social challenge** articulated by Drucker above. Further, it is a collaborative project between a university, a research institute, a set of worksites, and several community organizations which would break new ground in this country and demonstrate the possibilities as well as the difficulties in vertical and horizontal integration.

Roles and Responsibilities of Participating Organizations

At the urging of the Chair of the DePaul University Board of Trustees, the School for New Learning (SNL) is the lead organization in this project. SNL is responsible for: developing the overall plan; securing funding from various, mostly private, sources; working with NCI and an industry advisory panel to carry out assessments to determine the skill sets required for entry level positions in the industry; assessing the skill levels of participants-to-be; arranging for or creating the curricular structures to prepare participants for work; selecting the organizational and individual participants, and insuring that the collaboration is effective.

Finally, SNL is responsible for refining the model to create an on-going, self-sustaining training and education effort to follow this initial project. As an outcomes-oriented degree program for adults at DePaul, SNL has the proper "orientation" toward serving the learner that can spell the difference between success and failure. DePaul University, since its inception, has stood for a "personalized" education and has emphasized service to less fortunate populations in Chicago.

NCI, an urban economic development research institute connected with the Kellogg School of Management of Northwestern University, produced the original occupational trend analysis for Chicago United, a local business group, that triggered the larger interest in this effort. NCI will develop an assessment instrument to be used by firms to evaluate current and emerging skill requirements of the entry level positions in logistics.

Once the analysis of required skill sets is complete, and participants are involved in the program, an on-going evaluation of their work experience will be conducted to determine the effectiveness of this approach. The longitudinal study of employment trends of the participating companies will also lead to a better understanding at the policy level of the shifts and changes in this sector of the economy.

The companies to be considered for this will come from the full range of possibilities in the industry: parcel services (UPS, Emory Airfreight, Federal Express), interstate trucking companies (Yellow, CFL, Roadway, Allied Van Lines), wholesale distributors (ACE hardware, Helene Curtis Cosmetics, WalMart stores), international carriers (APL, CSX, SeaLand), regional trucking companies, and local firms. Firms must see the long-term benefit of this effort share and share the vision of the social (as well as economic) utility of this project for them to be willing to invest leadership energy and financial support.

Companies are expected to make apprenticeship positions available during the training period, support new employees with mentorship and continuing educational benefits, create career paths where none existed before, and finally, share in the implementation and leadership of the project through teaching, participation on advisory panels, and evaluation activities. Our goal is to create a working group of 6-8 progressive companies to participate.

Likely individual participants for this project will be sought from various community and neighborhood organizations throughout Chicago. These organizations are essential to getting appropriate referrals, but even more important is the longer term need for support and continued connection as the frustrating demands of job training and the new workplace face each participant. It is not our intention to pull people out of their natural environments to put them in a some sort of experiment. Rather this effort will carried out *in situ* as much as possible.

Churches, housing project social clubs, athletic teams, drop-in centers, hot lines, civic improvement organizations, and neighborhood centers will all be potential sources of referrals. Community colleges, GED programs and other agencies that provide services to the target population may all play a role. The goal would be to establish a network of 6-8 organizations which would be formally linked to the program.

Curriculum Concepts

The curriculum design process is need-based, driven by our understanding of the gap between each participant's levels of skill and the requirements of the logistics position. After reading and consultation, we began our analysis of specific entry level skill requirements with focus groups composed of interested industry representatives. Among other things, we asked them what skills they seek in new employees entering their workforce with high school diploma or GED.

Their answers converged on these characteristics and skills: basic writing, math, and reading skills, motivation, decision-making skills, interpersonal and verbal communication skills, teamwork and collaboration skills, and computer literacy. Some insist on drug-free employees. Others put a higher value on technological skills and math, depending on the job.

At the same time, we were aware that there are such things as generic employment skills. Attention has been paid to these recently in discussions about the impact of technology and globalization of the economy. One such attempt was made in 1991 by the U.S. Dept. of Labor with the Secretary's Commission on Achieving Necessary Skills (SCANS). The report, "What Work Requires of Schools," termed these skills **workplace know-how** and goes on to suggest that they define effective job performance today. In their research they found that this know-how was composed of two elements: **competencies** and a **foundation.** The report outlines five competencies and a three-part foundation of skills and personal qualities that lie at the heart of job performance.

One might have predicted that the two sources of information regarding characteristics and skills for this project would be quite different, but we found that the information from the focus groups fit very neatly into the framework provided by the SCANS report. An outline of the SCANS results follow, with more detail provided and underlined in the areas mentioned by the focus groups.

Five Competencies

Resources:	Identifies, organizes, plans, and allocates resources
Interpersonal:	Works with others Participates as member of a team - contributes to group effort
Information:	Acquires and uses information Uses computers to process information
Systems:	Understands complex interrelationships
Technology:	Works with a variety of technologies

A Three-Part Foundation

Basic Skills:	Reads, writes, performs arithmetic and mathematical operations, listens and speaks - (All were mentioned in this category.)
Thinking Skills:	Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons Decision-making: specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternative
Personal Qualities:	Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty[2]

The next step is to understand more fully what is required for actual performance and develop a set of competence statements that represent the requirements of the positions. The curricular requirements will evolve from this work, and we can set about designing or locating educational activities which enable participants to improve their skills and "workplace know-how" to a level adequate for the immediate job, and with a future for promotion. Sources for instructors in these activities will be area community colleges, GED programs, and arrangements with individual instructors such as trainers and teachers from the community, business and industry.

Opportunities for Practitioner Research

As a new faculty member at DePaul University's School for New Learning, and who had previously been involved in program development in adult education, I view this project as having enormous potential for practitioner research. Practitioner research is the antithesis of traditional descriptive or analytical research in that it requires involvement to get a feel for the problem being studied. It is more concerned with "knowing how" than with "knowing that."[3] The central design concepts of this project - skills assessment, recruitment of groups, mentors, and vertical and horizontal integration - offer challenging opportunities for practitioner research.

Skills Assessment

It is critical to understand the beginning skill levels of each of the participants in order to prepare them successfully for positions in the logistics field. A modified form of the Behavioral Event Interview (BEI) is being considered as a positive and effective assessment tool. This interviewing technique grew out of David McClelland's motivation research and has been carried forward by Boyatzis and many others. It has been used to match students to college environments, people to the requirements of jobs, as well as determining the characteristics (competencies) of effective leaders and managers.

A competency in the BEI lexicon is a measurable characteristic of a person which can predict superior performance. It can take one of six forms: skill, knowledge, social role, self image, trait, or motive.[4] Transcribed material from a BEI can be coded using the framework above and used to make predictions as to possible performance levels of the interviewee. It is experienced as a very positive interview because it encourages discussion of successes, analysis of problems, of things they are familiar with. Its one major drawback is the high cost of the time and training necessary to implement it well.

Recruitment of Groups

Rather than recruiting and selecting *individuals* one by one for participation in this project, we will take a different approach. Working primarily through interested community organizations (housing project organizations, churches, neighborhood organizations) we will identify small (2-5) groups of likely participants. Theoretical support is lent to this approach by the adult transition research of Nancy Schlossberg, in which she studied the dynamics of transitional times in adults' lives. Her research shows, among other things, that individuals moving into new situations (in this case job training) do better if they have the support of or move with a membership group. She borrows Kahn's term, calling this group an essential "convoy of support" for the person undergoing transition. Entering a job training program can be thought of as a critical transition/decision in an adult's life.[5]

Additional support comes from study of participation in adult education by Swedish social psychologist Kjel Rubenson. His model suggests that if a reference group or membership group approves of the action, then the person is much more likely to get involved and stay with it. This dimension is one of the key aspects of the person's perception and interpretation of the environment.[6]

Mentoring

Mentors will be employed on both the community and employment side. Although most studies of mentoring have been done in business or academic settings, the functional roles mentors play could be central to the success of participants in this project. Some of these roles cited by Carter and Norris are: transmitter of values, host and guide to new occupational world, exemplar of virtues and achievements, model of professional behavior, teacher/trainer/coach, evaluator of products and progress, and sponsor/patron/benefactor.[7]

The mentor from the community will be important to provide the continuing connection with community, to help them try out the new role in the community, and set limits to have some chance of success. We envision a mentor working with no more than 2 or 3 participants. In the workplace we will use an apprenticeship model, again with each mentor connected with the same small number to provide the greatest chance for success during the first year.

We believe that a combination of the recruitment of membership groups, where you bring some of your friends along, and dual mentorship will greatly increase the chances for successful education and entry into the logistics field for the young men and women who participate.

Vertical and Horizontal Integration

The foundation for the education program design is based on the idea that improved vertical and horizontal integration is crucial if we want to significantly improve the delivery and effectiveness of education and training in this country. Vertical integration refers to the necessary articulation and linkages between the various levels for formal education and training (such as between grade school and high school, or high school and college).

Horizontal integration is the relationship between the different institutions and programs operating to serve similar or related needs. (Examples are coordination between the services offered adolescents: high schools, public and private, and a trade school; or between all GED programs in a given geographic area.) Now that we have achieved "mass education" in the U.S., only this integration can bring about the comprehensive lifelong learning systems which are required to meet the social need to which Drucker refers.[8]

This collaborative effort offers rich possibilities for participating organizations, the individuals to be served, and for practitioner research. The measure of success of this effort will not simply be the experience of the participants and the companies served, but ultimately the ownership of the activity by the companies and community organizations involved.

Endnotes

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3. David O. Justice. "Practitioner Research: Access and Knowledge," *CAEL News*. II:6 (December 1988).

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7. Frances J. Carter and Raymond C. Norris. "Quality of life and graduate students: components and predictors." Presented at AERA, New Orleans, 1984.

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MAINSTREAMING THE ADULT LEARNER - A STORY OF SUCCESS

Denise M. Hart
Gloria Dyer

Customer service is primary during a time of decreasing enrollments and institutional downsizing. Although the literature is conflicting re: ability grouping by age, preference or achievement levels vs. "mainstreaming", the Success Program at Fairleigh Dickinson University has achieved success by meeting the needs of the undergraduate adult students it serves by providing both the option for select homogeneous-by-age classes and mainstreaming of students into the academic community.

Fairleigh Dickinson University (FDU) is an independent non-sectarian institution of higher education serving broad and diverse constituencies. With three main campuses in New Jersey, each with its own identity and separate mission, and a wide range of academic programs, the University preserves the intimacy of a small college within a large suburban institution. Easy access to New York City enables students and faculty to take advantage of the city's financial, cultural, and international activities. The University encourages students to experience overseas study and offers its own Wroxton College campus in Oxfordshire, England, as a model.

The University seeks to challenge each student to realize his or her full intellectual, personal, and career potential. To achieve these goals, a supportive educational environment is provided through excellence in institution, advisement, and a full range of student services. The learning experience is enhanced by interaction with faculty and students of diverse backgrounds and nationalities and by providing all undergraduate students with an academic foundation rooted in a common intellectual experience. The University offers the opportunity for full-time

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or part-time study to traditional undergraduates, adult learners without a baccalaureate degree, and graduate students. It also serves the broader public through a variety of special programs, publications, and events. Consistent with national statistics, Fairleigh Dickinson University's mature student population, 25 years of age and older, comprise 49% of the entire student body, undergraduate and graduate.

Recognition of the Adult Learner

The Success Program, Fairleigh Dickinson's adult baccalaureate degree program, is a highly personal approach to college studies. Through this program, students may pursue a variety of baccalaureate degrees in the Colleges of Liberal Arts, Arts and Sciences, Business Administration and Science and Engineering (see Appendix A). These mature learners represent individuals who have either never gone to college before or those wishing to continue their college studies which were interrupted for a variety of reasons and never completed. Those students who have attended college previously are encouraged to submit all former transcripts for review and evaluation toward their present program.

Students may also elect to fulfill requirements for a formal secondary area of concentration or clusters of related courses in most disciplines, i.e., journalism, women's studies, business management, etc.

Success Program students are guided from their initial inquiries through commencement. Before entrance, students are interviewed by a Success Program Coordinator at the campus of their choice where they receive detailed information regarding admissions criteria, programs of study, registration information, and other academic counseling. Declared majors also have advisors in their major departments in addition to the Success mentor. While the Success Program advisor provides generic information, the "major" advisor can forecast the opportunities within the student's specified area of interest.

Supplemental to the services available to all other students in the University, Success Program students may take selected courses designed for adult students in the varied subject areas, and may receive credit for prior learning equivalent to college level skills/knowledge appropriate to their personal program of study. These assessments are conducted by University faculty with expertise in the area for which the student is requesting evaluation. The University also accepts CLEP, TECEP, DANTES, ACT-PEP credits, and American Council of Education approved PONSI.

Student Profile

During the Fall 1991 semester, there were 783 students at all three campuses with the student population in attendance at each of the three campuses as follows:

422 Florham/Madison
136 Rutherford
225 Teaneck/Hackensack

Of those students, 93.74% are part-time, 65.64% are women with the average age of all Success students at 35.91 years. Of the majors available, the most often selected in order of priority across all three campuses are:

Humanities
Business Management
Economics (B.A.)
Psychology
English

Special Program Provisions

Program Mentors

A paramount feature of the program is the personal advisement provided to each student by Success Program staff. Although counseling primarily centers upon the undeclared liberal arts major, academic advisement is available throughout the student's FDU college career. Department major advisors supplement this process by providing discipline-focused advice. Appointments, in all cases, are scheduled at times convenient for the students twelve months a year, and in conjunction with other services, available to adult learners.

Selected Courses

The offering of selected courses is another major component of the program. Several courses per campus are available each semester. These courses provide substantial support in at least three different venues:

- the courses are offered in disciplines such as mathematics, foreign languages, lab sciences, and computer sciences where anxiety among adult students is greatest, and in general education requirements; the course content is exactly the same as other sections of the course, however, the faculty are cognizant of the challenges and expertise the mature learner brings to the classroom;

- these classes provide an atmosphere for peer support and the opportunity for the development of new friendships as individuals enter the academic community;

- these courses are supplemented by resources and personal assistance available through the Learning Centers at each of the three campuses; academic support ensures the students of successful course completion and continual academic ministrations.

Courses offered to date at all three campuses have included such subject areas as:

Beginning French
New American Lifestyles (Sociology)
Music History and Literature (Fine Arts)
Literary Classics in Translation (Foreign Language/Literature)
Humanities Seminar (Philosophy)

During the Summer I semester, 1989 and 1990, the Success Program offered a special overseas opportunity for program students. An interdisciplinary course, entitled "The English Mind," was presented at our Wroxton Campus, Oxfordshire, England, during a two-week intensive study tour.

Not all students enroll in the selected courses, however; evaluations by those who have participated are very positive and supportive of the option.

Prior Learning Assessment

FDU recognizes that adult learners may have vast experiences in employment and leisure activities. These experiences can be turned into college credits through life/work experience credit assessment. Success Program students may receive up to a maximum of 30 credits, tuition-free for knowledge/skills which are equivalent to college-level learning and fulfill requirements within the student's program of study. Students who wish to apply for experiential credit must attend a Portfolio Workshop series to review policies, procedures, content of the requests and writing style, which are offered on each of the three campuses during the regularly scheduled Fall and Spring semesters and first Summer Session. A manual entitled "Guidelines for

Life/Work Experience Credit Evaluation" lists all policies and procedures related to the evaluation of these credits. As students begin to prepare their portfolios subsequent to the workshop, the full-time Portfolio Advisor counsels students individually through the final product and credit award.

Faculty Development: Evaluation of Experiential Learning

Since the program's inception in 1985, University faculty have been invited to workshops which introduced them to the concepts, theories, and practices for the implementation of prior learning assessment. Faculty had the opportunity to place themselves in the role of the adult student applying for credit, define learning outcomes, and establish standards for the evaluation of requests in light of their own disciplines. The insight gained in these workshops strengthened the faculty's abilities to deliver educated decisions regarding student requests, raised the consciousness of faculty to conduct objective evaluations, and enlightened individuals who had never before assessed prior learning applications.

The workshops provide faculty and administrators with an introduction to the assessment process. Topics include the history and philosophy of experiential learning, the needs and responsibilities of adult students in seeking credit for their prior learning, and the role of the faculty in defining learning outcomes and setting standards. The presentation was experientially based and provided practical application. Attendees had the opportunity to address the critical issues as they related to their disciplines.

Being in the Mainstream

To meet the greatest needs of all the undergraduate adult learners, we have offered both select general education courses in a variety of subject areas on each of the campuses for students who enjoy the social interaction and academic milieu of being among their own age cohort, and opportunities to mainstream with all University students in all curricula. None of the 36 degree options available to Success Program students can be taken entirely in homogeneous-by-age classes. This is for a good reason. The literature in education, which has examined a variety of cohorts (gifted students, elementary-grade level students, etc.) since quite early in this century, has yet to come to a firm conclusion regarding the benefits of homogeneous groupings of students. In fact, grouping students in "streams" or "tracks" on the basis of age, ability, or preference has produced contradictory conclusions. Mainstreaming allows for a greater opportunity for social interaction. In addition, current research being undertaken by several Rutgers University graduate students seems to emphasize the overall increased achievement of all students in classes where the population was heterogenous-by-age, with the exception of math courses (Novak, 1992).

However, for those adult learners who are initially apprehensive, the homogeneous-by-age classes serve their needs. They create a comfortable environment for returning to the classroom while providing a certain social desirability. As the adult learners begin to perceive their college-level capabilities, they are prepared to "leave the nest" and venture into the wide array of departmental course offerings.

Initially, faculty members too were apprehensive and hesitant about teaching classes containing adult learners. However, they need not have been. Classroom experiences have been very positive. Once faculty members have taught adult learners, they request future assignments in Success sections and/or adult learners in their courses. This is mutually beneficial to the program and the professor, to the adult learner and the traditional-aged student.

Consistent with sociological concepts regarding the nature of groups (Tischler, Whitten, & Hunter, 1986, Chap. 6), mainstreaming for the adult learner draws the student into the "in-group" of the college classroom and campus. There is a "we" feeling developed for the non-traditional learner who may have been absent from the traditional classroom for a long period of time. The sense of belonging which develops from becoming a member of the mainstream empowers the student, reinforces their motivation to continue, and may retain a student where other situational or dispositional barriers create a question of their retention.

Likewise, the status and esteem that the adult learner achieves by being mainstreamed is self-fulfilling. Just as Schlossberg, Lynch, and Chickering (1989) noted, the adult learner (via the mainstream) is allowed to move in, move through, and move on with their education.

University Sensitization

Through a variety of mechanisms, including University-wide adult learner conferences, a program newsletter, "Success Stories", meeting with each and every University department, and a University Advisory Committee on Adult Learners, the Office of Adult Education has been attempting to provide a continuing education of the University staff, faculty and administration re: the adult learner. Although we have made great strides in the short six and one-half years of the Success Program, we have many hurdles yet to overcome.

Conclusion

Since the program's inception, Success has increased in size, thirty-fold. It is obvious that there is a need among the adult community for the pursuit of an undergraduate degree and FDU, by the Success Program, is fulfilling that need.

BACCALAUREATE DEGREES

Four year programs of study leading to a bachelors degree are available in these areas:

	M	R	T
Accounting	X	X	X
Art		X	
Biochemistry			X
Biology*	X	X	X
Business Management	X	X	X
Chemistry	X		X
Civil Engineering Technology**			X
Clinical Laboratory Sciences (Cytology, Medical Technology, Toxicology)***	X		X
Communications			X
Computer Science	X		X
Construction Engineering Technology			X
Economics	X	X	X
Electrical Engineering			X
Electrical Engineering Technology**			X
English Language and Literature	X	X	X
Environmental Science			X
Finance (Economics and Finance)	X	X	X
Fine Arts (including Theatre)	X		X
French Language and Literature	X	X	X
History	X	X	X
Hotel, Restaurant and Tourism Mgmt		X	
Humanities	X	X	X
International Studies		X	X
Marine Biology	X		X
Marketing	X	X	X
Mathematics	X		X
Mechanical Engineering Technology**			X
Medical Technology	X		X
Nursing			X
Philosophy	X	X	X
Political Science	X	X	X
Psychology	X	X	X
Radiologic Technology****	X		
Science			X
Sociology	X	X	X
Spanish Language and Literature	X	X	X

* Rutherford Campus students will complete their upper-level courses in this major on the Teaneck-Hackensack Campus.

**Special transfer programs for graduates of two-year programs.

***Joint degree with the University of Medicine and Dentistry of New Jersey.

****Admission to this program is temporarily suspended; the program is being revised.

In addition to the above majors, FDU offers a wide variety of concentrations, double majors, internships, accelerated courses, and honors programs on its campuses. Transfer students also are welcome at FDU, and a number of special academic programs have been developed especially for transfer student interests.

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THE TEACHING OF CRITICAL THINKING SKILLS TO NONTRADITIONAL COLLEGE STUDENTS

Flora A. Miller

Nontraditional students often arrive at college without having acquired the skills necessary for college learning. Retention of these students is enhanced when there is a holistic approach to meeting their special needs. Remedial and developmental instruction in the basic skill areas usually serves as preparation for college-level course work. The area of critical thinking, though often not considered, is an additional learning skill. Many nontraditional students have learned through the didactic method of teaching; as a result, they begin their college experience with undeveloped thinking skills. These skills can be taught across a basic skills curriculum.

Since its inception in 1966, the City University of New York SEEK Program has pioneered the area of developmental education. SEEK is an acronym for Search for Education, Elevation and Knowledge. This program exists in each of the ten senior colleges within the university system, and it is designed to offer special remedial and developmental courses, tutoring, counseling, and financial aid. "Underdeveloped Thinkers" is the term that best describes our students. They have high school averages of below 75 or New York State General Education Diplomas. Many are not properly motivated, having been turned off from learning before reaching high school. Also, they come from inner-city neighborhoods where everyday problems and events are frustrating and depressing. The majority of our students are African American, Puerto Rican and Latins; they express doubt about the value of a college degree because of racism and discrimination. Because of academic experiences where they were not required to think about what they were learning, they are initially unable to make connections across subject areas and between classroom learning and real-life situations. All of these factors affect their readiness to learn. The development and use of higher order thinking skills can help them to become better learners; this can also help them to become able to examine belief systems and idealogies that shape egocentrism and sociocentrism thought.

Flora A. Miller, Assistant Professor, John Jay College of Criminal Justice, SEEK Program, New York, NY

The SEEK Program at John Jay College prepares its students to enter the college mainstream. John Jay is a liberal arts college with a special mission. All degree offerings are in the area of criminal justice and public service. Upon graduation, many students become police officers, lawyers, firefighters, court and correctional officers, security managers, and civil service workers within city, state and federal governments. They are our public servants. In preparation for their careers, they must learn how to read, write, compute math, and communicate effectively. They must also learn how to think and to interact effectively within multicultural environments. We must prepare them to serve us well within their chosen professions.

Because most of their learning experiences have taken place in classrooms where teachers utilized the didactic, linear method of teaching, our beginning students are not free, analytical, independent thinkers. Students retain ten percent of what we tell them; they retain 90% of what they do. The greater their participation, the more they learn.

The purpose of education is to teach skills useful in gaining knowledge through understanding about ourselves and our universe. If we can help students learn how to read, write and think, then they can become partners with us in the discovery of knowledge. Jawanza Kunjufu contends that many educators focus on content instead of process, and do not provide connections between knowledge and the application of it. The assumption is that if the curriculum is followed, students will learn to think as sort of a by-product. According to him, thinking is the skill of teaching oneself; leadership is the skill of getting others to lead themselves. Both are skills that can be learned (Kunjufu, 1988).

Success for the nontraditional students increases when we develop methods and strategies designed to increase both their learning skills and their empowerment within the classroom. Paul offers a theory of learning that accomplishes this. He offers the belief that:

> The fundamental need of students is to be taught how not what to think. It is important to focus on significant content, but this should be accomplished by raising live issues that stimulate students to gather, analyze and assess that content.

When critical thinking is infused into instruction, students can learn to think about what they are thinking, while they are thinking, so as to make thinking more clear, precise, accurate, relevant, consistent, and fair. Through this process, students develop the art of constructive skepticism, identifying and removing bias and prejudice, self-directed, in-depth learning, and rationally certifying what we know and making clear wherein we are ignorant (Paul, 1990).

During their freshman year experience, students can learn basic critical thinking skills that can be applicable to classroom experiences and real-life situations. Integrating the teaching of these skills across the basic skills curriculum greatly enhances the students' ability to read, write and think. This approach to teaching is best achieved when there is a shared commitment which guides college administrators, faculty and staff in their planning to meet the special needs of the nontraditional student. For example, critical thinking is elevated when it is a shared process. Small groups within the classroom can often heighten or stimulate thinking in ways that are conducive to learning. In order to create a physical environment that comfortably contains the arrangement of small groups, individuals in charge of administrative affairs and campus facilities must be involved in planning and in shaping the classroom environment.

Most of us work within colleges where the approach to the development of special services for the nontraditional student does not take place within a holistic framework, so we must struggle to integrate as much as we can, when and where we can. We must constantly strive to create more dynamic learning experiences for our students. The ideal model is one in which all of the parts of the college work together to design curriculum and supportive services based upon the needs and abilities of students. Alverno College in Milwaukee, Wisconsin, offers such a model. The entire college worked together to develop a curriculum infused with the teaching of critical thinking and multicultural content that is ability based and outcome orientated. Their students are required to demonstrate the use of eight broad abilities at increasingly complex levels in general education as well as areas of specialty. They are taught from a model which fosters the development of thinking abilities across the entire college curriculum. All teachers share in the responsibility of helping their students become critical thinkers (Alverno College, 1989).

Several years ago, our SEEK Program tried to teach critical thinking skills across our basic skill curriculum. This experimental project, called the SEEK Grid Project, was designed to teach learning skills and to reinforce their use. We had noticed early on that our students tended to learn skills, but not recognize their transferability to other learning situations in other classes. For example, the students would learn how to outline in an English class, but would not be able to utilize this same skill when required to prepare a speech; or we would work on problem-solving skills in Freshman Colloquium which, according to students' own confessions, they never applied outside of the classroom. Within the Grid Project, we attempted to instill the idea that basic skills are learning tools useful in obtaining knowledge in all areas, both inside and outside the classroom. We formed a Grid team of teachers and a counselor. In our initial planning, we developed a Grid of learning skills and how each skill would be taught across the curriculum. We also selected a learning theme that provided content for us to work with.

We selected Crime and Criminals as our theme. It was related to the mission of the college, and it offered exciting possibilities for creative and critical thinking around criminal justice problems and issues. We worked with a group of our incoming freshmen. Through block registration, they attended all of their classes together. Our Grid faculty met bi-weekly to discuss how and what teachers were teaching, and student progress. We also talked about what each of us would do to reinforce what had been taught, or what we could teach jointly. We also planned a team project. One semester, the Grid faculty and our students produced the play, ***Woman***. This one-character play was written by our English teacher. It is about a Black migrant worker who was raped by her boss and ended up on death row. With monetary help from our student government, the students worked with the director on the production of the play. Teachers helped students to learn how to use the library to gather background information, how to formulate questions, and how to analyze and evaluate information. After the presentation of the play, students led a discussion including the author, the actress and the audience. In their Freshman Colloquium class, students researched and discussed careers within the field of criminal justice. Working with the Grid Project was exciting for the teachers and it was felt the students were more interested and involved in their learning. There was a problem which we were unable to overcome. The project operated two years during a time when our student body was increasing, without additional staff, and we were forced to hire adjuncts to teach many of our classes. This project was last because of budget constraints and the refusal of the college to commit to our program priorities. Despite roadblocks, we continue to look for new ways to teach learning skills to our students.

Presently our SEEK Department is moving toward a model that we can use to infuse the teaching of critical thinking skills and multicultural materials across our basic skills courses. We are adapting some of the current material coming from the Critical Thinking Institute at Sonoma State College. Also we are using Ruggiero's Stages of Creative Process. This process provides a framework for problem-solving and issue analysis. The four stages of this process are searching for challenges, expressing the problem or issue, investigating, and producing ideas (Ruggiero, 1991). By using this four-stage process, students will gain practice in how to think critically. The process is used with the understanding that some problems and issues do not require use of all of the four stages; also sometimes the stages may occur in a different order or might overlap. In addition to the use of this process, we are developing a list of critical thinking skills, such as asking questions, clarifying issues, evaluating arguments, deferring judgement, and transferring insights to new contexts. We are refining materials that we will use collectively. We will involve students through writing, brainstorming and discussions, questions and answers, special projects, field trips, and research.

Sample
Critical Thinking Exercises Used in Freshman Colloquium

Exploring Stereotyping

Racism and prejudice almost always involve stereotypical thinking. There are stereotypes about every conceivable kind of social category. Nor are all stereotypes negative in character. Stereotypes tend to ignore the "whys" that explain the "whats" (Goode, 1984).

Directions:
Within our small groups, we will explore what you know about the following:

1. A definition of stereotyping.
2. Primary causes for stereotyping.
3. Kinds of stereotypes (give examples).
4. Results of stereotyping.

Conduct a half-hour brainstorming session on what you know about the four areas above. Record all of your responses for class presentation.

When your brainstorming session is ended, individually answer the following questions:

1. Did you feel any energy from the group as information was offered?
2. Was new information created?
3. Were there any ideas worth pursuing?
4. Can you use this brainstorming technique to help solve a problem?
5. What problems can you immediately think of where you can use this brainstorming technique?

Sample
Classification of Freshman Colloquium Material for Higher Order Skills

Topic	Skill	Questions
1. College Readiness	Evaluate; compare; examine values.	Discuss the ideal student? Identify strengths/ weaknesses. How is college different from high school educational values?
2. Critical Thinking	Socratic questioning; assessment.	What is critical thinking? What kind of thinker are you? How to develop critical thinking skills.
3. Time Management and Stress	Making inferences and predictions; giving reasons and evaluating evidence and facts; exploring implications and consequences.	What does a realistic weekly schedule look like? What is a healthy lifestyle?
4. Career Exploration	Exploring interests; exploring beliefs; developing criteria for evaluation; compare and contrast.	How do values and beliefs shape your career choice? Why one career may be more fulfilling than another? What must you do to pursue a chosen career?
5. Cultural Diversity	Develop insights to egocentricity or sociocentricity; explore thoughts underlying feelings and feelings underlying thoughts; evaluating assumptions.	How we view ourselves within the larger world? What stereotype do you foster? How do your stereotypes influence your behavior?

Topic	Skill	Questions
6. Relationships	Analyzing behavior; clarifying issues; listening; making inferences; evaluating arguments.	What underlying feelings and thoughts influence our behavior? What is fairness?

Sample
Workshop Exercise

Thinking about Knowledge, Learning and Literacy

In order to move progressively from a didactic to a critical thinking model, teachers have to examine some of their assumptions about knowledge, learning and literacy, for these assumptions shape our approach to teaching.

Directions:
Organize into small groups and explore answers to the following questions. Within your group, select a recorder to write your responses.

What are your assumptions about:

1. The purpose of education.
2. The fundamental needs of students.
3. The relationship of basic skills and thinking skills.
4. The desirable classroom environment.
5. Depth versus breadth.
6. Role definition for teacher and student.
7. The responsibility of learning.
8. The transfer of learning to everyday life situations.

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CAMBRIDGE COLLEGE: PROVIDING THE ENVIRONMENT FOR INCLUSIVE WAYS OF KNOWING

Kathleen Moran

Feminist researchers and educators are shaking the educational community with studies of the different worldviews and the consequent educational needs of women and men. Cambridge College (of Cambridge and Springfield, Massachusetts) is a small, twenty-year-old alternative Master's Degree program for teachers, managers and mental health counselors that has incorporated in its unique structure elements that provide the kind of environment that promotes successful inclusive education.

> "None of us knows what all of us knows."
> Eileen Moran Brown, President,
> Cambridge College

In the recent book, *Women's Ways of Knowing* (Belenky, Clinchy, Goldberger and Tarule, 1990), Belenky and her team suggest a number of reforms to make education more effective for women. These modifications include offering competency-based education, changing from a competitive to a cooperative learning climate, and restructuring traditional teacher/student roles to empower the learner. The new women's ways advocates recommend "midwife-teachers" who encourage learning with a confirmation-evocation-confirmation process, allowing the student to view the teacher's own cognitive procedures, and thus demystifying learning strategies. They advocate a connected teaching style, which determines the level of the student's current knowledge and takes her from that point to a new level in the learning process.

This paper examines some of the structures at Cambridge College (a small alternative Master's Degree program for teachers, managers and mental health counselors in Cambridge and Springfield, Massachusetts) that reflect these values and contribute to the success of the participants. In addition, it seeks to further consider how these structures aid in the education of other learners (including males) who are currently identified as "minorities."

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The *Women's Ways of Knowing* group was very specific in their suggestions about how teaching must change to fit the needs of women. At the heart of their recommendations is the transformation of the teaching role from that of the "expert," who lectures day after day, viewing students simply as vessels to fill with knowledge. Women, say Belenky and her associates, need to learn in an environment that empowers them, yet maintains standards of academic quality. Women fear "losing" in learning because their subordinate status in America has offered them too many experiences where they have come out labelled inferior. The teacher, say the authors, must take on a new role - that of the coach or ally, who sees education as a process of making connections. Education must begin at the student's level, accepting her fears and previous learning experiences, respecting these psychological/emotional mindsets, and working through them in order to move on. They feel that faculty and administrators, as governing members of educational institutions whose primary concern should be the education of the *student*, must place the principles of inclusive education at the center of the educational endeavor, before the maintenance of impersonal academic standards. Instead, colleges have been exclusionary institutions, participating in the sorting (or tracking) of human resources. The populations excluded from higher learning up until now have been women and people from ethnic minority backgrounds. Educational researchers are now studying why they are being sorted out of success.

Dr. Maurianne Adams, in her chapter entitled "Cultural Inclusion in the American College Classroom" says:

> Despite the belief (held by many faculty) that their own college classrooms are culturally neutral and that cultural neutrality is itself an academic norm, the assumptions and values that characterize higher education mainly derive from aspects of European culture shared by many nineteenth- and twentieth-century European immigrants to this country, who benefitted from higher education to the degree that they already shared common history and could thereby understand the norms and participate in the behaviors of its educational systems. Yet this academic culture is narrow in that it rules out nonverbal, empathic, visual, symbolic, or nuanced communication; it neglects the social processes by which interpersonal communication, influence, consensus, and commitment are included in problem solving; it overlooks the social environment as a course of information, together with observation and questioning, as information-gathering methodologies; it

ignores the values and emotions that most people attach to most reasons and facts (Border and Chism, eds., in press).

There has been a lot of research done in the past ten years on inclusive education (under the aegis of multi-cultural education). Inclusive education recognizes that, although there is a wide range of cognitive learning styles even amidst people of homogeneous cultures, there are definite and identifiable differences in cognitive styles emphasized by the different cultures. Some of these differences can be explained through cultural customs and orientations that do not "melt" away within the framework of American society, but some of the learning styles are results of the inferior status of minority cultures. Subdominant identity groups in the United States include women; ethnic minorities such as Hispanics, African-Americans, Asian Americans and Native Americans; religious minorities (which consist generally of other than Christian religions); people of alternative sexual orientation; and those who are physically challenged.

One author, Helms (1985) examined dominant/minority group identity elements and found that "(1) minority groups develop modal personality patterns in response to white racism; (2) some styles of identity resolution are healthier than others; (3) cultural identity development involves shifts in attitudes involving affective and cognitive components; (4) styles of identity resolution are distinguishable and can be assessed; and (5) intracultural and intercultural interactions are influenced by the manner of cultural identification of the participants" (Moore, p. 61).

Janet Hale Benson reports on the early studies of Rosalie Cohen (1969) who identified two dominant learning styles: relational and analytic. People with relational characteristics orient their learning around self, but self *in relationship* to others, are global, creative, and emotional (identical to the "women's ways of knowing" defined by Belenky's team and to similar work conducted at Harvard by Carol Gilligan), while analytic learners center thinking outside themselves, break knowledge into particulate constructions with linear forms. American education, as Professor Adams pointed out, is constructed to cater to the latter cognitive style.

Cohen theorized that children develop learning styles through the socialization they receive in their families and peer group circles (church, school, neighborhood organizations). She found that children brought up in "formal" structured families (typical of white middle-class American families) tend to utilize the analytic style of thinking, while children of a more "fluid" family organization i.e. the extended family of the African-American and Hispanic cultures or the "we" valuing (as opposed to the "me"-valuing) culture of the Asian-Americans, are more comfortable in a relational cognitive style.

Cohen states that cultural differences not only affect how students learn, it affects their worldview, in a way that can be quite dissonant with the current administration of educational institutions. Noting that most relational learners have a philosophical orientation that values relationships, producing a circular, or non-linear, way of considering the world, she shows how the dominant linear worldview affects relational thinkers:

> . . . without the assumption of linearity, such notions as social mobility, the value of money, improving one's performance, getting ahead, infinity, or hierarchies of any type, all of which presume the linear extension of critical elements, do not have meaning for the relational child. In essence, the requirements for formal abstraction and extraction of components to produce linear continua are not logically possible within the relational rule-set (Hale-Benson, p. 40).

In her appeal for inclusive education, Dr. Adams calls for the instituting of several principles in the college environment that will hold for students of different minority groups: "a recognition of 1) difference not deficit; 2) creation of learning environments for all, not some, students, which are 3) based upon multicultural, not ethnocentric principles of teaching and learning, inclusive rather than exclusive, responsive and flexible rather than fixed or predetermined, and derived from 4) cross cultural models of cultural reciprocity and interaction that will ultimately benefit all students" (Border, Chism, eds., in press). Cambridge College works very hard to achieve these all.

Cambridge College: The Structure of Inclusive Education

Cambridge College offers two basic programs in three areas of concentration. The Master's program offers a Master's of Education in Counseling Psychology, Education and Integrated Studies. It also offers a Master's of Management. Perhaps the most distinctive program in the College is its Graduate Studies Preparation Program (GSPP). This is a certificate program that bases admissions on life-work experience, and offers courses which prepare students to enter the Master's program without a baccalaureate (although they are required to have some college credit in order to fulfill admissions requirements). The courses are tendered on evenings and weekends, or during the school vacations (for teachers), and in every manner possible, the school is responsive to the needs of the adult learner. The College has an ethnic minority enrollment which comprises between 35 and 40 percent of the population. The average age of a student is 35. Almost all of the students are full-time working professionals from every type of occupation.

Born in the educational reform times of the late sixties, conceived of by John Bremer, dean of Newton College of the Sacred Heart and progenitor of the many innovative schooling programs, and operationalized through the partnership of two visionary women, Eileen Moran Brown and Joan Goldsmith, the Institute of Open Education (as Cambridge College was called for many years) originated in the community, was formed by active and concerned teachers in the community and has remained a vital part of the community since. The three founders were advocates of the early open education reforms - student centered teaching techniques based on the ideas of Dewey and Piaget. In their formation of the Teacher's College, they immediately applied these techniques and the idea of community support by making the mainstay of the program be what they called "the support group."

In that era of consciousness-raising groups, the idea of support groups was not foreign, but educational support groups were revolutionary. And yet, as inclusive education advocates would say, it is precisely what a person of a cultural minority needs in order to be successful in their academic endeavor. The support-group/seminar that Drs. Brown and Goldsmith engineered (entitled Professional Seminar in the Master's program, and Life Long Learning Seminar in the Graduate Studies Preparation Program) provides a forum where students can integrate their academic learning with their professional lives. Professional Seminar (Pro Sem) continues the length of the student's tenure in the program. Like new-age recruits into boot-camp, students come into the program together, into Pro Sem together; they face the individual cultural, intellectual and life/work shocks that are endemic to returning to school after many years together; and by encouraging each other, cajoling each other, and in general, caring for each other, they somehow manage to get through. The Professional Seminars are led by a core faculty member who stays with the same group of 16-20 students throughout their program. Pro Sems are often drastically different in overall design, reflecting the personality of the faculty member in charge, yet they share many elements. Pro Sem has remained an unshakable part of the curriculum, despite prodding from assessment agencies who wonder just what the *content* of this evanescent course is. Students, alumni and faculty who have experienced Pro Sem respond that "you've just got to be there" to understand. It is the epitome of the "process as content" course, where the learning is virtually impossible to quantify, but the impact is unforgettable. It practices the social processes that Dr. Adams urges educators to include in the college curriculum, helping students learn good interpersonal communication, understand the ways they influence and are influenced by others, and find ways to problem solve and come to consensus.

The administrative structure of any institution has an effect upon the educational policies and values that are espoused. Although the College has what seems to be a hierarchical structure (Board of Trustees, President, Vice President, Department Chairs, etc.) in practice it is a network, a non-linear form of governing. Roles are fluid. The President and Vice President are accessible, open to meeting with any member of the College community. The typical College decision-making body is the committee (which is generally open to all interested, which might include students) and a consensus decision is usually sought.

Affirmative action guidelines are more than upheld at the College, which is only right, because the current ethnic minority student enrollment percentages exceed those of the general population. The College emphasizes the need for positive role models and mentors in their hiring of faculty, recruiters and staff. And, another way that the College honors the differences of the cultures of its community, as Dr. Adams recommends, is through its calendar. Although the College is set up to accommodate the schedules of working adults, and takes place on evenings and weekends, ethnic holidays have always been respected. Martin Luther King, Jr. Day is a major time of community celebration.

Advocates for inclusive education point out that relational learners are tuned into their communities. Cambridge College was spawned from the community into the community. From the beginning, the idea of community was endemic to the learning; courses were taught on-site in alternative schools and in a nearby women's prison, reinforcing the College's commitment to provide education to people of all social classes. This culture of valuing community, so important to women and people of color, was more than accepted by the burgeoning College, it was imitated in programmic design. There have been twenty years of student community meetings: problem-solving sessions where students and administrators collectively find answers to student concerns. Two Saturdays a semester, the College offers free workshops to the public. These two hour workshops are facilitated by all members of the College - students, faculty, alumni - and consider a range of topics. Cambridge College has a Center for Diversity and Change, which holds conferences and offers consultation in issues of diversity to area businesses.

Adherence to principles of "connection" in education is demonstrated in many ways at Cambridge College. The faculty concentrates on bringing people from where they are into the new and unknown, by identifying and respecting each student's starting level and process. Classes are small, from between 15-30 students. The setting is intimate. Cambridge breaks down the role of teacher-as-figurehead, upholding President Brown's favorite quotation, "None of us knows what all of us knows." Most of the faculty hold outside jobs in their fields, keeping them aware of real world issues, and narrowing the gap between them and their students, most of whom are working professionals.

The concept of taking the student from "where they are" holds a whole host of ramifications and consequent responsibilities that Cambridge College upholds. The first is the andragogical principle of valuing people's life experiences. The Graduate Studies Preparation Program (GSPP) is, as mentioned before, a unique certificate program which allows students to enter the Master's program without a bachelor's degree. For many years, the GSPP student documented his or her life/work experience through an extensive Portfolio, which included historical narratives; self-assessment by means of cognitive, life-skills and affective taxonomies; and goal-setting on functional (i.e., career), educational and moral planes. The Portfolio, although very taxing, is counted by GSPP students as one of the most important documents that they produce in their lives (second only to the Independent Learning Project).

Taking a person from where she is means offering competency-based education, whereby if a person can demonstrate a skill competency (say in basic math) the student can waive the requirement, instead of taking a course just to fulfill requirements. Competency-based education means developing ways for the students to judge their own learning needs and set their own life-long learning goals. This is empowering them by allowing them to be in charge of their own educational lives. To take a person from where he is means that the College must accept English as a Second Language (ESL) difficulties and poor writing skills as a part of the fallout from American ethnocentrism and its impact in the public schools. This means being prepared to remediate the situation. The College offers free tutoring services in ESL, writing and math; writing labs are available for students, as well as fully equipped computer centers that are open for student use.

Adams and other inclusive education advocates propose education that utilizes all aspects of personal endeavor - creativity, empathy, problem solving, examination of social processes and consideration of values. Cambridge College is well-known for its use of experiential learning techniques. Lectures are short, for students practice theory in action through interactional instruments, role plays, and hands-on instruction. Newsprint is always available around the College, for brainstorming and sharing of student perceptions is a usual mode of conducting classes. Even in this era of back-to-the basics and the resurgence of the bell grading curve, Cambridge College maintains a pass/fail policy for grading (in the Master's program), where a passing grade is considered to be B or better. This promotes the atmosphere of cooperation in learning that is a significant difference from the competition-based grading policies of other institutions. Students seldom fail at the College. Faculty are more apt to return papers for revisions than to give up on a student altogether. The idea of life-long learning is never far from consciousness. There are exams at the College but they are not the usual form of assessment. More common is a summary paper which allows the students to integrate their learnings with their professional lives. Students at Cambridge College often use creative means to show their knowledge, such as small group presentations and staged experiences (in the GSPP required course *Introduction to the Arts and Humanities*, students regularly take their classmates on simulations of historical art periods - the European, American, and Harlem Renaissances, complete with period costumes and art work borrowed from local museums). Students use movement, video techniques, and write poetry, among other things. Professor John Grassi, veteran faculty at the College, spoke of a perfect reproduction of a Japanese tea ceremony that a student performed to demonstrate a form of systems theory.

The capstone project of the Master's program is what is called an Independent Learning Project (ILP), which may either be a research document or a project. The main point of the ILP, it is emphasized, is *not* that it contribute to some esoteric academic research (i.e. what the advisor is working on), but that it is important to the student, to the community in which he or she operates, and finally to the general body of knowledge about the subject. The ILP is an important part of the Professional Seminar, with student support groups meeting through every aspect of its formation - from the original choice of a topic through much of the writing. Students comment on each other's work and ask hard questions about purpose and need. The practice of the ILP study group mitigates the role of the teacher as primary authority in the classroom, although she or he has final say both in the choice of topic and the quality of the document.

Cambridge faculty have modified the case study method, famous in most schools of management, which examines real-life situations in business. Students use analytic and problem-solving skills in considering the problems in the cases to come up with solutions. The Cambridge College case study has students preparing case studies *from their own work environment* - real-life problems. Students use critical analysis skills to distill a work problem into pertinent facts, and then develop leadership skills as they direct their classmates in the discussion and problem solving. They get to take an objective view of his or her professional environment and at the same time share its culture and policies with others. It is a very powerful peer learning experience, which may be the mother of the Cambridge College expression "the group is the curriculum." We all learn better when the issues are real, current, and a part of our immediate world. The Cambridge College case study method provides this opportunity.

Sometimes it is important to break all symbols of linearity/hierarchy to help the student of a relational orientation to feel safe. Cambridge has a number of what could be termed circular teaching techniques that are a deep part of its teaching culture. These techniques can be as elementary as arranging the seats in a circle, instead of keeping students lined up in impersonal rows. The point of the circular techniques is that of interchange - allowing shared experiences. Although this seems simple and obvious, it has underlying values which are very powerful. Cambridge College faculty have found that the circle is where the affective part of the learning, which is never allowed in typical college classrooms, emerges. The circle provides the structure for the "give and take," the feedback loop, which extends from each student, to each student, and to and from the faculty. It embodies the idea of reflection and response. Cambridge College believes in having people speak of and to their learning, by creating dyads and triads, small clusters of groups that allow each student to summarize what they know. The affective components of the subjects that are studied, the real-life feelings that are involved in all parts of lives, even in what seems to be as Dr. Adams points out "reasons and facts, "are not repressed. They are welcomed into the discussion, accepted and even utilized to create more of a learning impact. Many of the Cambridge College faculty feel that the way to achieve inclusive education is to examine values. Values have created this world, and only by examining and re-adjusting harmful values will we be able to change ourselves in order to promote equality and justice.

What is the down side of this educational endeavor? Foremost is the issue of assessing and maintaining academic standards. Students *feel* that the education they receive at the College is valuable (and alumni surveys show effective professional growth), yet how can this be shown? What students learn, they learn well, but how does this compare to what occurs at other institutions? Most of the traditional ways of assessing learning have roots in the linear/competitive framework of education which has dominated the American educational system. Cambridge College's Center for Learning and Assessment is developing new ways to assess learning, to ensure that quality be maintained. But this is ground-breaking work in hostile educational times. Many institutions of higher education are wrestling with this same problem. How, for instance, can one quantify the learnings that go on in the Professional Seminars? Yet many students will attest that, despite the incredibly dynamic teachers in the "content" courses, the most memorable learning took place in the Professional Seminars and the Independent Learning Project. But only by proving the efficacy of the teaching will Cambridge College be able to carry these techniques out to the educational community.

Another problem is training new faculty to fit into the influential new model as teacher as "mid-wife" or facilitator of learning. Faculty training in this fairly ineffable role is difficult - perhaps impossible. Many new teachers find themselves at a loss as to how to live up to the standards that students expect from Cambridge College teachers and they despair. Ancillary to this is the problem of the time that it takes to really become involved on a more individual basis with students. Because of the intensity of the teaching experience, most of the faculty find that their research is out of the question. Consequently, educational inquiry is put on hold. Yet, Cambridge, with its pioneering educational efforts, *should* conduct research on its teaching methods, and quantify the results that we now just sense are successful. The College should encourage faculty to publish papers on techniques and policies that will augur general educational change. For Cambridge College has more than twenty years of practice educating diverse populations. It has the knowledge and skill needed to fulfill the appeal to create educational environments that validate, respect and utilize all peoples' ways of knowing.

So, in answer to the advocates that call for inclusive education, Cambridge College can say that its record of successful experience in providing a learning environment for *all* people who are willing to work proves that alternative educational techniques *can* succeed. With its principles of valuing differences; of creating an multicultural climate that enables all types of people, with different learning styles to learn; of being flexible and responsive to student needs; and maintaining a reciprocity of intellectual and affective exchange, Cambridge has graduated over 5,000 capable, responsible and dedicated professionals who bring this success back to their communities.

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MAKING CHANGES FOR BETTER EDUCATIONAL OPPORTUNITIES

H. Keith Spears

Many universities are reviewing how they can provide better service to the nontraditional adult student. A shrinking pool of traditional college students has administrators eyeing this new constituency with a mind for alternate delivery systems. This paper documents the changes one mid-sized university has to initiate as it brings course offerings to students heretofore considered outside its service mission.

> Change is the law of life. And those who look only to the past or the present are certain to miss the future.
>
> John F. Kennedy
> Frankfort, Germany, 1963

On May 10, 1991, thirteen nursing students from Logan, West Virginia graduated from Marshall University, with Bachelor of Science degrees. A remarkable feat considering their attendance at the commencement exercises marked the only time these students had been on the Marshall campus. Working at Logan General Hospital, seventy-five air miles (120 mountainous road miles) from Marshall's campus, the students were able to remain in their local community and complete all criteria to upgrade their associate degrees to four-year BSN degrees. Course requirements were met by televised distance learning delivery via satellite.

The success of the nursing program was noted by others within the institution. Some perceived that additional programs of continuing education and nontraditional adult education could be possible. However, hurdles were to be overcome. Distance education has not been fully embraced by faculty or administration. It has however, found a following among those who are not apprehensive of the technology. It is

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these individuals who are realizing that the university of tomorrow will not be bound by the geographic or political realities of today.

The university has a dilemma. It seeks to integrate the thinking of the reformative sector into the rest of the institution. It was Ashby (1981) who advised that an education in the use of technology is essential if higher education is to keep pace with the realities of the technical world. Success of distance education rests in its ability to deliver the diversity found within the institution. Otherwise, the system will be destined to be narrowly identified with selective programs. This would be a disservice to television and the academic programs that miss the opportunity to serve a new constituency.

Background

Technical

Television has been a regular part of our society for over forty years. Since its earliest beginnings, the technology associated with television has been viewed as a boon for education (Gordon, 1965). Universities were the first to recognize its potential and thus were the initial institutions to attempt to manage it. As television evolved so did the procedures for using it and the need to create corresponding policies (Hull, 1962). The rapid expansion of communication's technical development meant that many administrators have had to make quick decisions. Those who followed old guidelines or wrestled a length of time with policies found themselves technically outdated by the time final decisions were reached (Cassirer, 1967). Today, administrators must adapt at a faster pace than ever before.

Distance learning, defined as a means of delivering education to a distant site via electronic media with the immediacy of an interactive component, is the latest evolution of the traditional correspondence school. Distance learning is bringing instruction to those who would either have to delay their education or forego learning altogether. Continuing education and other programs in nontraditional education are using electronic delivery as a means of increasing offerings to those who are unable to attend conventional classes.

Distance learning is finding favor with many educators because of its immediacy. Unlike the older forms of correspondence education (e.g., mailings, audio tape, video tape), distance learning allows the student to have direct access to the instructor during the time that the instruction is taking place. Spontaneity in classroom discussions, feedback of student concerns, and student responsiveness to the teacher's instruction create an atmosphere more aligned with the normal parameters to which most professors are accustomed.

Since 1986, Marshall University has been involved in the development of distance learning opportunities. Marshall's service region has a ready-made topography for satellite technology. The mountainous terrain makes it difficult to develop many standard electronic highways. Microwave must have multiple towers. Wideband telephone lines are too expensive to stretch through the uninhabited areas to reach distant towns and cities. Satellite technology reverses the trend of most technological developments. Practically every other innovative advancement in society, e.g. telephone, cable, water/sewage, paved streets, and electricity, came first to the urban community. The use of satellite communication is made to order for the less populated sectors. The proliferation of satellite dishes (downlinks) in rural portions of West Virginia is ample evidence. In 1987 a reported fifty thousand downlinks were registered in the state. An additional thirty thousand unregistered dishes were estimated to exist (O'Keefe, 1987). No doubt more have been constructed in the past five years.

Policy

Getting faculty to utilize distance education technologies has been a slow prodding process. Like many other institutions, Marshall has not taken quickly to this new delivery system. Studies have shown that excitement may be immediately associated with an innovation, but the intended change will also create resistance on both the organizational and individual levels. "Systems usually perpetuate rather than change an individual's level of functioning" (Newell, 1978, p. 184). People often fear change and the impact that change may have on their positions.

> Our society is in the process of making a major shift. We're moving beyond the information age into an age of communications, and that calls for a concomitant shift in management style (Holman anticipates, 1990).

In 1987 Marshall began to develop plans to incorporate distance education into the curriculum. Following recommendations from the Council on Post-Secondary Accreditation (COPA, 1984), it was recognized that close communication among the diverse participating groups of the institution was essential. A campus-wide task force was formed. Representatives from each college were chosen to work on policy for distance education. After meeting several times, the only recommendation to come from the committee was a change in administrative reporting. The administrator was elevated to a director's position reporting directly to the Vice President for Academic Affairs. Otherwise, no definitive policies were established.

Inactivity in distance education development was the result of two major circumstances, administrative changes and state budget cuts. For a period of three years, 1988-91, the academic leadership of the institution changed three times and the president's office was occupied by a like number of different persons. Innovative planners were faced with difficulties in maintaining momentum. Simultaneously, beyond the campus, the state system of higher education was undergoing radical changes. A single line system transformed into a dual organizational structure dividing the four-year and community colleges into one group and the universities into another. Faculty and staff had difficulty in focusing on new programs or delivery systems when they were concentrating on the more basic structure of the university and the security that it did or did not offer. It was Baldridge (1979) who offered that decision-making is integrated with the political character of the campus. New techniques will step on toes, invade traditional domains, and conflict with vested interests.

A preliminary study revealed a number of concerns found within the ranks of the faculty:

1. Was there an adequate population for distance learning courses?
2. What curricula were best suited for the medium?
3. The system would overtax an already overburdened faculty.
4. The system would take dollars from other worthy programs.
5. Staff members lack procedures to deal with learners not on campus.
6. Distance learning raises questions of course credibility.
7. Potential students would be unaware of the offerings available via telecommunications.
8. Nontraditional students who use telecommunications will lack the support services offered to on-campus students.

These concerns were verbalized to the task force. Wishing to avoid controversy in turbulent times, the task force chose to avoid the development of distance education until these issues could be addressed by a stabilized leadership.

During this same period of time, state allocations were reduced. Some of these cuts came in the midst of the academic year. Previously budgeted money had to be returned. Deans, directors, and other administrators scurried to recoup any funds they had to ensure completion of the academic terms. This austere climate was not conducive to the introduction of new ideas. Few administrators, lacking funds to maintain existing programs, are willing to entertain new proposals from those outside their governance area. In a larger sense, this is an issue taken up by Shrivastava and Souder (1987). They suggest that technology innovation sponsored and supported by one unit, which is not connected to the work of other units, is likely to create problems for development.

Former president of the United State Distance Learning Association, Ray Steel (1991), points out that higher education administrators are keeping a watchful eye on this innovation in teaching. They are finding implications that need to be addressed. The technological advancements of distance education are creating excitement, anxiety, and apprehension for those in higher education. Lack of substantive procedures and policy creates an aura of concern that many administrators must content with. It was this climate of apprehension in which Marshall University found itself when its new president took office in August, 1991.

Implementing New Strategies

Each institution involved in distance learning must inevitably respond to a variety of local influences and come up with a pragmatic operational system, matched optimally to its own context (UNESCO, 1983).

Under the leadership of a new president, Marshall University has developed a proactive position in developing programs for nontraditional students via distance education. Although plagued by continued budget cuts, the institution has proceeded with distance learning programs and has made nontraditional student service an institutional priority. Marshall would agree with McCutcheon (1987) that lifelong learning, reconditioning of skills and the advent of nontraditional students are causing institutions of higher education to rethink their approach to teaching. The formalization of this alternative delivery system encompasses state board notification, identification of need, reorganization, marketing, internal assessment, prediction of success, and full implementation.

New Initiative

The West Virginia Board of Trustees, the university governing board, has been officially notified of Marshall's intent to better serve the nontraditional student. Whereas before the institution paid lip service to the process -- "Marshall University . . .has strong programs to aid returning and nontraditional students" (Marshall University Mission Statement, 1991) -- a formal initiative is now on file in the state higher education office. While not detailed in nature, this document communicates clearly that the university plans to mount a campaign of service to these students via telecommunications and expects funding to support the endeavor.

This notification has significance beyond its mere announcement. It proclaims to other institutions in the state that Marshall University expects to properly serve the adult student population in its region, thus absolving any potential conflicts of "territorial rights" in the future. This declaration signals the state legislature of the specific intent of the university. A twelve-month advance notification of new programs is indispensable when budget line items are being reviewed by the lawmakers. Many heated debates can be defused if legislators are shown that the institution had earlier notified all interested parties and had requested comments concerning its goals.

Identification of Need

"For distance education projects to be successful, they must address identified needs" (LaBaron, 1989). It was determined that a thorough study of the need for nontraditional education and alternative delivery systems was imperative. Following a directive from the Vice President for Academic Affairs and the university's dean's council, this author and an associate academic dean conducted a needs assessment. The results are summarized below.

There is a declining base of traditional students in the Marshall University service region. West Virginia is projected to have a nineteen percent (19%) decrease in the number of high school graduates in the next ten years (*Chronicle of Higher Education*, 1991). The traditional student enrollment, which makes up 68% of West Virginia's college population, is on the decline. Overall the state is projected to have an increase of only one percent (1%) during the next ten years.

There is a large constituency of would-be learners that are not being served by higher education. Only ten percent (10%) of the adults in West Virginia has four or more years of college. This is the lowest in the nation. Coupled with an improved high school graduation rate, the figures represent a large population eligible for college. However, financial obligations, family and time commitments, and distances from campuses prevent many of these individuals from attending college in the traditional manner.

Another constituency having a need for higher education is composed of graduates from community, technical, and junior colleges who seek to upgrade their credentials. Bringing continuing education units or degree programs within the reach of this segment of the regional population will provide new opportunities for those who perceive that improvement in education means better career possibilities.

The region's economy needs more people with higher education. Heavy industrial labor forces have diminished in West Virginia, particularly in Marshall's service region. Mining, logging, and other natural resource related companies are using more mechanized production requiring less manpower. Industries of the tri-state area are cutting back on employment. Some communities have unemployment rates in excess of twenty-five percent (25%) (*Herald-Dispatch*, 1992). Businesses which have employment opportunities are demanding a work force with technical skills, skills that are available from a university.

Finally, serving the nontraditional student via telecommunications will satisfy a need of the university to limit the demand on its physical plant. Nontraditional approaches to higher education use alternate resources of the university. Distance learning courses use only a minimal physical presence on the campus. The receive sites are typically being utilized at prime vacancy hours in the host facilities. A shift to nontraditional delivery systems limits commuting to campus. Therefore there is no need for parking lots, extra classrooms, dorms, security, custodial help, utilities, cafeterias, and the bevy of other requirements an institution must have for the on-campus student.

Internal Assessment

An institutional report was made based on an internal survey of current university offerings and student support related to nontraditional education. Research of instructional times, delivery systems, and outreach programs was accomplished with assistance of Institutional Research and various offices that deal with nontraditional students. Discussions were held with each college dean to determine the extent that the academic sector is providing nontraditional programs. Advisors and academic support personnel were questioned to ascertain the resources being utilized in support of nontraditional students.

Results:

- All colleges are engaged in some form of nontraditional education.
- There is no one clear description of a nontraditional student.
- There is a high population of part-time students at Marshall signifying a larger potential population living at distances from the campus.
- Current course scheduling does not encourage nontraditional students to pursue degree programs on a part-time basis.

- Confusion exists among students, faculty, and staff as to where nontraditional students should turn for support, advisement, etc.
- Few administrative functions (admissions, registration, financial aid, parking, advising, etc.) are available at nontraditional times.
- There is a perception among students that many faculty do not like to deal with nontraditional students.

The report made it clear that Marshall University has the potential in developing a fully functioning program of delivery and support for the nontraditional student. However, the results also demonstrated that the institution would need specific directives to accomplish such goals.

Reorganization

While Marshall University is streamlining it administration, nontraditional education has received prominence. Congruent with the suggestion of Prisk (1992) that successful programs have high profile and equal stature, an academic dean's responsibilities were "strengthened" by formalizing the role of nontraditional duties under his authority. Verduin and Clark (1991) emphasized that a major concern for effective distance education is who manages, controls, or administers the program. At Marshall, the instructional television's general manager role was upgraded to a director's position and given the responsibility for all distance education courses using telecommunications. Public television courses heretofore under the coordination of a part-time faculty position were brought under the wing of the instructional television director.

Marketing

For the first time in the history of the institution, off-campus courses via television were promoted by advertising. Prior to this the only information available was through press releases forwarded to regional newspapers and the regular listings in the university's schedule of courses.

Instructional Television Services developed a small campaign to inform the public about the availability of televised higher education courses. Using the university's radio station and support of a broadcast faculty person, radio spots were produced. Time was purchased on regionally recognized stations with demographics matching the 24-52 year old population Marshall intended to reach. Newspaper ads were laid out and placed in the "style" and "entertainment" sections of the daily newspaper in the region.

The result of this trial marketing campaign was a two hundred percent (200%) increase in enrollment in the televised courses. During the Spring '92 semester, all sections of televised courses filled and were declared closed by the registrar, a first for the university. Clearly, the advertising reached the targeted segment of the population.

Prediction of Success

It is imperative that an institution have more than a "gut" feeling that a new program will have a success record. As Hanson (1979) reported, the use of telecommunications is expensive and is very visible to the community. Marshall needed to know two important items: 1. Will people accept media-based delivery systems?, and 2. What academic programs are needed?

The first question was answered by both researching the literature and completing an institutional research survey. Hayes (1990) suggests that the general adult perception of instruction by telecommunication is positive. Prey's (1992) recent work at Marshall confirms the earlier finding. However, use of televised education by adults goes beyond liking. It is often the only means of reaching the institution. Brey and Grigsby's (1984) findings suggest that conflicting schedules and travel time were the most common reasons for taking distance education courses. When given the alternatives of obtaining instruction via television or not at all, the medium wins over any and all objections.

The second issue, determining appropriate programs to use on the system, is more complicated. Three tactics are being pursued to accomplish this objective. The university is reviewing employment needs established by the state agencies associated with economic development. Comparative analysis of a statewide survey by the Annenburg Foundation is being made to correlate the needs of adult education in the Marshall region. Finally, the university's own Center for Regional Progress is implementing a telephone survey of adults in the region to ascertain what programs would have a constituency of off-campus students. These are concurrent on-going activities and results were not available as of this writing.

Summary

A number of researchers have confirmed the problems an institution will face when attempting change. Marshall University is no exception. Developing nontraditional delivery systems in a university accustomed to traditional delivery of courses is a slow, difficult process. While group decision-making is the preferred method of policy development, initiation of distance education concepts demands administrative leadership which is committed to the concept and is willing to weather the storm of dissension which is inevitable. Concerns of funding, credibility, and job security are never too far from the point of controversy. However, Marshall University has experienced the essentials in cultivating a successful program in distance education. Notifying all concerned parties, identifying needs, assessing existing resources, reorganizing for centralized control, developing marketing plans, and establishing methods of predicting success are steps that any institution will find useful. It was Murgatroyd (1990) who suggested that those who do not scrutinize the relationship between institutional commitment and expected results can find its operation and service hindered. Institutions of higher education which intend to change a portion of its modus operandi to serve new or extended constituencies must be aware of the many steps necessary. The task will not be simple nor will it occur overnight.

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A PATHWAY, NOT A GARDENPATH: QUALITY AND CONTENT IN ADULT DEGREE COMPLETION PROGRAMS IN BUSINESS ADMINISTRATION AND MANAGEMENT

Edward G. Weiss

Many colleges and universities have considered offering an Adult Degree Completion Program (ADCP). Many of them have decided to attempt the offering, and many of them have even succeeded, at least financially. This paper will present a pathway to follow in the decision-making process when considering and implementing an ADCP. Further, this paper will argue that most ADCPs exist for financial reasons and that too large an amount of the financial gains derived from them comes from trading-off quality. At the same time, this paper will shed light on some of the reasons that more traditional academics have for holding ADCPs in low regard. Many of this paper's arguments will be anecdotal, either personal or hearsay, so there will be disagreement. But you will be led to a pathway, not down the proverbial gardenpath.

The pathway to an Adult Degree Completion Program[1] almost always begins with money, actually the absence thereof. Although there are a few instances in which the college or university just sees an exceptional marketing opportunity, the reason for initially considering an ADCP is almost always a need for money, and all too frequently, a desperate one. And, therein lies the rub. The college or university is experiencing budget shortfalls caused by declining enrollment, most often due to the rapidly diminishing traditional student base, and almost always in the face of rapidly escalating costs of operation. Somewhere, even now, there is someone at some college or university who is responsible for balancing the institutional budget and is worried sick because of the continuous shortfall of income relative to expenses. Neither does there appear to be any end in sight to the continuous blood-letting. Further, that someone has just heard about ADCPs, probably at some conference or other at which it was little more than a peripheral issue. So, why not? Others have done it. Why can't we? We could have our own cash-cow.

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Let's try a thought experiment. Put yourself in the place of the overburdened and overwrought administrator trying to balance a budget which seemingly can't be balanced when the thought of an ADCP comes to mind. "Assume 20 students at $200 per credit hour over a 30 hour program. That's $120,000. A new start-up group every other month, and we have three-quarters of a million dollars a year." That ain't hay; neither is it overly optimistic.

"But," our administrator says to him/herself, "there are, after all, start-up costs. But, not really. Those start-up costs are really very small. The buildings are here. The extra utilities, etc. will cost very little. The day-to-day clerical staff is in place, so that won't cost us anything. Of course, there is the added faculty to be considered, but an additional 30 semester hours is only 2 1/2 more faculty at $30,000 to $40,000 each. That still leaves about $500,000. Hell, let's do it."

Yes, an ADCP can bring in desperately needed income. Yes, an ADCP can help balance the budget. Yes, an ADCP can help (note "help" not "ensure") an otherwise faltering institution survive. It is assumed that the newly instituted ADCP will show high profits immediately. However, this type of thinking is wrong, just plain wrong. Much more thought and planning is needed than is usually given the matter. The pathway to an ADCP is not a gardenpath; the pathway is filled with a maze of land mines, haphazardly strewn and of tremendous power. Speaking anecdotally, I know the strength of those land mines; I have stepped on too many. In retrospect, I would like to think that I could have avoided some of them if only I had been paying better attention, or if I had been forewarned that they were lurking out there.

An ADCP must be instituted correctly. "Correctly" means, first of all, that institutional changes must be in agreement with the institutional mission or the institutional mission must be rethought and rewritten to include the proposed changes. Failure is frequent when an institution attempts projects outside of or contrary to its mission statement. Further, if the stakeholders of the institution (administration, faculty, traditional students, alumni, etc.) are not behind the changes, some of them will surely volunteer for night patrol in order to plant those land mines in the pathway. As most of those involved in either non-traditional programs or interdisciplinary ones have experienced, most of the difficulties and frustrations involved in the attempt to institute a new program come from those traditionalists who are little informed, and all too often, don't wish to be. One also must examine the institutional culture. It just might not be a proper one for an ADCP. If so, the institution is better off without the new program, at least for the immediate future. It would most likely fail anyway. These problems are not often considered or addressed; they need to be.[2]

As indicated above, many will ask, "Why are we doing this? It is not part of our mission." Answer these questions honestly. "Because financially, we have to. We will have to modify our mission if we are to survive." Explain the logic. "Almost all of the costs of running an ADCP are variable costs. That means that our fixed costs can be cost-accounted over a larger base. Even a moderately successful program will be able to make considerable contributions to the budget."

However, there are costs to instituting the program. The most important is that courses must be designed. One cannot just grab a syllabus for an existing traditional course and use it for an ADCP. Adult learning and traditional learning are different, and ADCP students and traditional students are different as well. The adult learner brings much to the table, and it's a different "much." Courses must be designed to bring their particular development, experience and needs into play. Often, the adult learner is already successful and will not be lectured to or at. While it's not that difficult to design new courses, neither is it easy. You will need someone(s) versed in adult learning as well as in course content. This is almost always a problem. It means either an outsider(s), the reeducation of your faculty, assuming that they are even in the least bit interested, or both.

Most other costs are either minimal, in the future, or variable. But, they are not non-existent. Fixed costs are minimal. The physical facility is almost always in place. Even if you eventually take your program off-site, your physical plant will be a variable cost unless you buy it. Assuming, however, that the physical facility is in place, the major effect will be an accounting change: fixed costs will now be cost-accounted across both the old and the new programs, thus lowering the costs of the traditional day-time program. The first place money is to be made in such a program is by sharing fixed costs. This should have been one of the major reasons for undertaking the ADCP in the first place. There are other costs involved, but as previously mentioned, they are usually relatively minor (utilities), variable (additional staff), or in the future (expanded facilities and services). You should be forewarned, however, that a successful program will probably create a demand for more personnel than you might imagine. ADCP students not only attend classes at different hours than traditional students, they also have different needs. Those differences will cause a need for more and different personnel, more library services, student services, etc., possibly even a need for altered facilities. Variable non-faculty costs of operation should be planned for carefully. They can be substantial. ADCPs are not necessarily the cash cows you might think they are. Remember, there are start-up costs, and there are maintenance costs. You ignore them at your peril.

Another area for concern is marketing. Many who are not familiar with ADCPs, particularly those who are against them, will cry out for a market study.

They will want to determine if there really is a market out there for this product. Of course, there is. A market study may help some by providing more sophisticated information, but generally, a study will prove to be superfluous and not worth the cost. Most of those experienced in ADCPs will say, "Don't bother with more studies. They're expensive, and the market is there. It's up to you to deliver your product." Even if this statement is not completely true, it's close enough. Further, if you plan your program properly, your start-up costs need not be excessive. It is understood that your budget is in crisis and that even a small loss cannot be comfortably absorbed should the market not be there or should the program otherwise fail. But, when risks are weighed against potential gains, start-up cost is not that significant of a risk. Unless there are extenuating circumstances, you should not delay your entry into the market in order to do extensive or sophisticated market studies.

But even if there is not a need for a marketing study, there is a need for a marketing plan. It should be obvious that if you don't attract students in sufficient quantity, you won't deposit the money in sufficient quantity. Unless yours is the only ADCP in the area, students will not flock to your doors just because you have announced your program, and probably not even then. A well-developed marketing plan is a necessity if you are to obtain the results you desire. Your marketing must be honest, aggressive and targeted. Marketing is not the area in which to skimp. If you are going to spend money, here is the place to spend it.

Next, let us consider the faculty who will be teaching the program. Many schools suffering lower enrollment have not been able to make corresponding decrease in their faculty. Thus, their faculty-student ratios have significantly decreased. Granting that lower ratios are more conducive to learning, ratios which are too low are just too expensive to maintain. Therefore, increasing the ratio by using current faculty in the new program can be very beneficial to the budget. However, current faculty will often not wish to become involved. "It is out of my area. I'm really not interested. I chose to do something else. I just don't want to." All of these arguments have validity. Further, ADCPs are often designed so that only the faculty of a few disciplines, namely Business Administration (BAd) and Management (Mgt), could be involved. Therefore, most of the time the new program will necessitate hiring additional faculty, which always brings up the question, full-time or adjuncts?

Without getting too deeply into the argument, it will be assumed that a too disproportionate ratio of full-time to adjunct faculty is not a good thing. That is not to say that the real world experienced adjunct cannot bring many good things into the classroom which otherwise probably would not be there. But, quality almost always suffers, and accrediting bodies don't appreciate it either.

Then, why do so many ADCPs have such a disproportionate ration of adjuncts to full-time faculty. The answer is, of course, money. Adjuncts are less expensive and substantially so. Greed wins out all too often. It is an administrative decision, not a faculty one. Let's assume that a teaching (as opposed to research) faculty member has a 12 hour teaching load, with teaching duties absorbing 70% of his/her time and is remunerated at $40,000 per annum. That breaks down to $3500 per 3 hour course. Even at $32,000, the figure is $2800 per course. How many institutions pay their adjuncts anywhere near that amount? This is a major area in the money-quality trade-off. It is also one of the reasons the more traditional academics think the way they do about ADCPs.

Traditional academics are also concerned about ADCP seat time. A traditional program, assuming a 3 hour course and a 15 week semester, meets for approximately 37.5 hours (45 X 50 minutes) of seat time. A 30 hour program would require 375 hours. An ADCP which meets once a week for 4 hours (less a 20 minute break) for 1 year (48 weeks) will provide only 176 hours of seat time; an 18 month program will provide only 264 hours; a one year program meeting twice a week for 3 hours (less a 15 minute break) will provide 264 hours. All of these configurations are substantially less than 375 hours, even assuming that sessions are never dismissed early, which of course they are. How, the traditional academic asks, can this diminished seat time be justified?

Again, without getting too deeply involved in the argument, I will assume that many of the arguments for reduced seat time for adult learners are correct and that under proper circumstances reduced seat time can be justified. However, I argue that reduced seat time, even for experienced adult learners, must be both course specific and student specific. Simply said, some courses lend themselves, more or less, to having reduced seat time and others do not, and some adult learners are able to learn this way and others are not. I believe that many ADCPs ignore these considerations. They are designed and marketed the way they are for no reason other than to sell the program to the adult consumer. Almost always, a major deciding factor for the potential enrollee is that the ADCP takes substantially less time to complete. The ADCP student must be able to complete his/her senior year in not much more than a year, attending class just one night per week, while still continuing on the job. Anything much more than that and the program won't sell. Selling the program is also the reason for longer sessions, 3 or 4 hours as opposed to 1.5 or 2. We know that a full evening in class after a full day on the job is quite difficult for most students and that the amount of information that could be absorbed would be much greater if smaller blocks of time and fresher minds and bodies were involved. But, shorter sessions mean twice as many sessions and twice the program length. Therefore, the longer sessions are used. Since the ADCP must compete with the traditional program and, most likely, other ADCPs, the length of the program as well as the intensity of the workload must be reduced if the program is to sell.

Let us consider an ADCP in BAd, one of the highest quality, one designed to provide its graduates high percentage opportunities for acceptance into a quality MBA program without remedial coursework. The BAd ADCP will often have higher admission requirements than other ADCPs. Most will demand 6 hours each in Principles of Economics and Principles of Accounting. Further, a BAd degree is, by its very nature, fairly quantitative (setting aside for the purposes of this paper the current argument that it is more so than it should be), and as a rule, I think it is safe to say that for most of us, the more quantitative the more difficult. Therefore, the BAd cannot be reduced to much less seat time than 10 sessions of 3 hours each. Since weekly sessions would cause the program to stretch out over 2 years, sessions meet twice weekly. Besides the fatigue and stress, there is now also less study time for more material and maybe even more important, less time between sessions to absorb the material. Therefore, both acceleration and intensity must be constrained if quality is to be maintained. Of course, another alternative would be to limit enrollment to those who are very highly qualified and who mostly are seeking validation of what they already know. But, that would decrease tuition income.

Because of the aforementioned, high quality ADCPs in BAd will not be common. They have a relatively small niche, so they do not prove to be the financial saviors that other programs can be.

So, most ADCPs will be in Mgt, not because it is of lesser quality than a BAd, but because it is qualitative rather than quantitative and better fits the accelerated program to which the potential enrollee is so attracted. Further, there is a real demand by employers for the graduates of these programs. However, the question is still how much acceleration can be justified? Because the Mgt program is not very qualitative, I argue that it can be more accelerated. But again, I argue that all too often even these programs are accelerated too much. Quality is sacrificed for enrollment. I know the immediate response I'm going to hear from the die-hard non-traditionalist: "the adult manager brings experience to the table; the adult student is more organized; the adult student is more dedicated, the adult student is more . . . ." I agree with all of these claims. But none of them offsets the claims made here. All too often, quality is reduced.

Let's review the pathway. Remember, the most likely reason the ADCP was started was money. Money can prove to be quite a motivator and more money can prove to be even more of a motivator. The income from these ADCPs can be quite substantial and the expenses relatively minimal. So, don't let the program's success turn your head. You need to determine whether you want a program of the highest quality consistent with your college's mission, the cost of the program and the market available or a cash cow.

Determine the quality and money mix you want. Determine the cost of developing and up-dating your program. Develop a budget and cash flow assuming moderate success. Remember, you have largely only variable costs. And, it is the quality of those variable costs which will determine how much income the program will provide. The more adjuncts, the shorter the program, the less the seat time, the less demanding the program will mean that much more income. Remember the toughness, the quality, of the program largely determines enrollment. But, it determines the level of your professionalism as well.

If the assumptions that most ADCPs are instituted out of desperation and the resulting quality-income tradeoff are correct, it shouldn't come as a surprise they are so frequently attacked by the more traditionalist academics. But, it needn't be that way.

Endnotes

1. The definition of an ADCP will vary from program to program. For purposes of this paper, an ADCP will be any non-traditional program designed for the adult student (age 25 or older) who has completed at least 2 years of college, which allows for an accelerated completion (usually 12 to 18 months) of the 3rd and 4th years, and has substantially reduced seat-time (usually 40% to 60% of normal).

Because most of my experience with ADCPs has been in either Business Administration or Management and because most ADCPs are in those areas, the concerns and scenarios of this paper will be limited to them.

2. This much abbreviated Case Study is based upon an anecdotal experience of the author. The college in question had an enlightened administration. The initiative for an ADCP came from the President and the Academic Dean. Further, they had the full support of the Board. Even so, after much time and effort, the program has been largely abandoned. There were, of course, many reasons for the failure, but mostly, it was that the institutional culture of a small liberal arts school would not support such a drastic change, and those who supported the program just weren't strong enough or experienced enough to overcome the resistance.

The college president followed the procedure for making major institutional changes recommended by Robert H. Waterman Jr. in *ADHOCRACY: The Power to Change* (Whittle Direct Books, TN 1990). He instituted a task force to study the question. The president appointed both newer faculty experienced in ADCPs as well as senior faculty members who could be quite influential in bringing the idea to the rest of the faculty and other stakeholders. And as hoped for, those senior faculty members became educated in ADCPs and got behind the program.

But after getting approval from the faculty to initiate a feasibility study, the strategy of Waterman's adhocracy theory was abandoned. Instead of continuing with the same members of the task force, who by now have assumed some stake in the project, the program was left in the hands of the aforementioned newer faculty, experienced with ADCPs but without much influence with the rest of the faculty. So when the going got tough, the program didn't have the tough long-term senior faculty involved to help get over the hurdles, usually reactive, but real ones placed there by the other long-term senior faculty.

ASSISTING INNER-CITY FAMILIES IN THEIR SUPPORT OF CHILDREN IN COLLEGE

Bessie Wright

Researchers have confirmed that inner-city families want the best that life has to offer their children educationally, financially, spiritually, politically and socially. Yet, the majority of inner-city families lack the resources to provide the appropriate support in many of these areas. This paper identifies the role counselors play in assisting inner-city students and their families in analyzing these issues and in facilitating an atmosphere which maximize support offered by parents and received by students.

The intent of this paper is to focus on the inner-city student within the context of family expectations and the education support provided by the family. Attention will be given to students' responses to these expectations and the support received. This paper will also discuss the role counselors play in assisting students and families to analyze these issues and in facilitating an atmosphere which will maximize support offered by parents and received by students.

In order to understand clearly the inner-city family, it is appropriate to provide a description of it as it is seen today. According to Wilson (1987) and Rodriguez (1989) the inner-city family is generally a heterogeneous grouping of families that is quite different in form and behavior from the middle class family. For example, they include dislocated, unemployed, single-parent-headed families with the majority being female. Many in this group lack training and skills and are early dropouts or pushouts from school.

While it is noted that there remain in the inner-city communities some small pockets of affluent families, the inner-city is mainly made up of poor African-Americans, Hispanics and relatively new immigrants from the continents of Asia, Africa, Europe and South America.

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Family Expectations of Their Children And Educational Support Provided By Family

Researchers (including Jenkins, 1989; Hall & Allen, 1989; Rodriguez, 1991) are among many who have provided documentation that inner-city families are like any other family in that they want the best that life has to offer for their children educationally, financially, spiritually, politically, and socially. In similar manner, most inner-city dwellers believe that education and a well paying job is the most direct way to upward and outward mobility. Rodriguez (1991) reports on a survey which indicated, "Blacks more than any other group in America believe that a college degree is more important than ever" (p. 1). The survey also stated that 86 percent of blacks believe it is very important to earn a college degree in order to get a job or advance in a career, while 72 percent of whites and 62 percent of Hispanics felt it was important.

It is a certainty that inner-city families expect their children to go to college. However, there appears to be some who are unable to provide the necessary support. In fact, some of the attitudes and behavior reported by some students about their families would lead one to believe that there are some who discourage their children from going to college.

Malone (1981) points out, "for traditional students, the nuclear family has customarily been the provider of emotional, financial, social and informational support." She further states that the non-traditional student expects the same kinds of support from family or significant others. Yet, the majority of these families lack the resources to provide appropriate support in many of these areas. For the most part, historically, inner-city families have not been in position to develop the kind of cohesiveness and resources which would permit them to pass them onto their children. Jenkins (1989) contends "From a historical perspective, black families have not been entirely free to manipulate the essential components of life to the same degree as have their white counterparts" (p.139). This statement could well be extrapolated to other current inner-city families. Several researchers have noted that these students may be the first in their families to go to college; they may come from single parent families where the resources are minimal at best. There may be a language problem in the home. These and many other reasons make it very difficult, if not almost impossible, for the families of inner-city students to provide the financial, emotional, social or informational supports of which Malone speaks.

In addition, there is the belief that neither student nor family of many of these students realizes or understands the full extent of the demands placed on the family as a result of a member attending college. Thus, a parent may expect the same routine from a child who is now a student as before the student began college. The demand may include the need for a child to make a financial contribution to the household or to make time available to babysit or run errands for a family member who is earning a salary. The financial situation for many is key, for as Malone (1981) points out, "although the problem of joblessness is found in other segments of society, unemployment is most acute in the inner-city where the disadvantaged are in greatest number. This means that financial support is not forthcoming for many inner-city students unless they work themselves. According to Wilson (1987), the amount of time and energy disadvantaged students spend working is at the heart of their difficulties and academic achievement. Even though many of these students are eligible for financial aid, it may not be enough to support their education and contribute to the household as well.

Students Respond To Family Expectations And The Support Received

Many students and their families agree that education and a well paying job is the most direct way to upward and outward mobility. Therefore, they respond positively to their families' expectations regarding the need to attend college. Even though resources may not be available from immediate family, the student will look for support from extended family or other sources, ie., financial assistance and counseling support through the college.

Rosenbaum (1988) suggested that for the basically traditional college student, the four-year college experience essentially recreates the student, starting with the base they had when they left home, putting it to the test, assimilating input from unexpected sources, and establishing a new conception of who we are on these bases. Yet, at the point when the student goes to college whether the student stays at home or goes away to college, there are many transitional problems and adjustments for the family and the student. These may include emotional and physical independence from the parents on the part of the student. At the same time, the parents face new concerns when they are forced to focus on new adjustments now that the parenting responsibilities are not as much needed. According to Perigo (1985), "students face the special concerns of developing autonomy and identity, while the parents face many middle life adjustments, only one of which is the student separating from home."

In addition, when the inner-city students view the lives of parents, adult relatives, older siblings and neighbors they realize education, per se, does not always bring an end to their joblessness and poverty. Therefore, they either become disillusioned about their ability to succeed in an adult life through the mainstream strategy of higher education or they realize that they must find other ways to make this avenue work for them. An alternative for many inner-city students is taking a full-time job while they attend school part-time. Another alternative may be an agreed upon separation from family where the student may take an apartment away from home together with several other students. In this situation, the student finds that living at home is becoming dysfunctional. Thus, the student and the family agree that it is necessary for him/her to become an independent student. Therefore, the family will no longer have the burden of caring for the student nor will they expect any contribution to the household from the student.

Once the student enters college, there is a need to negotiate a new relationship which permits the student freedom of deciding what the extent of involvement will be with the family. Felder (1988) recommends three considerations which needs to be focused on when attempting to improve relationship between college students and parents:

1) The parents must become more aware of how they may be forcing unrealistic or inappropriate expectations on their children - this is especially true for inner-city families who expect full financial, emotional, and physical support from children who are full time college students;

2) College students must become more aware of how they may be forcing unrealistic or inappropriate expectations on their parents - this consideration holds true for most inner-city students who want to hold expectations of their parents to the same level as students of traditional middle class families. This will include the expectation of financial support, high levels of privacy in a crowded household, and the sharing of information and skills which will promote an easier college life for the student.

3) Both should examine their own communication habits and willingness to respect each other's feelings and points of view (p.106).

Counselor's Role In Assisting Families In Their Support Of Children In College

Malone (1981) states, "An holistic perspective by the counselor enables the counselor to be 'glue,' in holding diverse factors of a student life together." Counselors can help families in their support of students as well as help students in their response to family expectations by forming networks with students, faculty, administrators and families. These networks function to help provide necessary information about college and careers; they provide added emotional and social supports students need that may improve their academic and social functioning. The counselor must also help students and families understand the need for independence on the part of the student while recognizing the interdependent relationship between themselves and the college environment.

Hoffman (1984) suggests that counseling psychologists dealing with college-age adolescents presenting personal adjustment problems may want to encourage building positive identifications with the parents, while helping the adolescents to disentangle conflictual relationships with them (p. 177). In addition, Henton, Lamke, Murphy & Haynes (1980) stated, "If there are ways for counselors and other college personnel to encourage the maintenance of close contacts between students and their families during at least the first semester of college, the isolation factor associated with college life may be minimized (p. 510).

Researchers, (Berry & Asamen, 1989; Rodriguez,1989; Perigo, 1985; Hoffman, 1985), all identify the important role the parents, peers, and significant others play in the successful educational functioning of the students. They encourage the development of an atmosphere which will facilitate an appropriate environment. They all acquiesce in their advisement to counselors, specifically, and the college community in general that orientation programs which help parents to feel welcome and important to the institution are very important in promoting students' college adjustment which lead to greater retention.

In these programs, the role of the counselor is key in helping the family understand the effects of the university life on the student; they provide information about how students and family relationships change and how students and family adjust to these changes. Information is shared which help students with the budgeting of limited financial resources, promoting better time-management and improved study habits. The counselor can stress the importance of involvement in extra-curricular activities and how it contributes to the all around growth and adjustment of the student.

Summary

Researchers have provided documentation which suggest that inner-city parents, like any other parents, want the best out of life for their children. Rodriguez (1991) suggests that many believe that "the best that life has to offer" is obtained by education and a good paying job. Therefore, parents encourage their children to attend college and many of the children respond positively to this encouragement. These students tend to expect their families to provide financial, emotional, social, and informational support which is customarily provided by families of traditional students. Yet, the majority of the inner-city families lack these resources. It is suggested that the counselor should encourage inner-city families to develop networks with those professionals who still live in the inner-city for the purpose of obtaining information about positions they hold which might be of interest in guiding their children's career; to obtain mentors for their children who are students; and to obtain information about standardize testing which will assist the family in interpreting them.

Counselors should provide orientation programs for students which extend through the freshman year; they should find ways to develop communities that would enable parents from homes that are successful to assist families that have not reached the same level. When necessary, they should serve as transitional objects of emotional dependency for the student and at the same time encourage the building of positive identifications with the family.

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PROVIDING QUALITY PROGRAMS OFF CAMPUS

GROWING HEALTHY HUMANITIES PROGRAMS OFF CAMPUS

James W. Clark, Jr.

Beginning with NEH funding in the 1970's and now supported by state and private revenues, Humanities Extension at NCSU has (1) broad-gauged administration; (2) a land-grant delivery system that is adaptable; and (3) a rich curriculum of substantive, in-depth seminars. These twenty-five ten-hour, noncredit offerings foster excellent faculty/community relations. Among other splendid spin-offs are (1) numerous requests for workshops for public school teachers; (2) literally hundreds of annual, remunerated OUTREACH visits by Humanities Extension faculty to public and private middle and high school classrooms, and (3) original video and print curriculum materials.

We know from our experience as readers that Henry David Thoreau devoted himself to adult lifelong enrichment, including professional development, long before the terminology we now use had been dreamed of. In 1854 *Walden, or Life in the Woods* appeared as an expanded account of the two years, two months, and two days Thoreau had spent in the woods beside Walden Pond near Concord, Massachusetts, between Independence Day of 1845 and September 6, 1847. Fearless Henry David was a continuing and continuous educator of himself and others. Trees and woodchucks as well as mere humans were his willing and unwilling students and teachers. He was a wise and worrisome Yankee, a New England original. He still is the model, for that matter.

Nontraditional and fully interdisciplinary, Thoreau had in him the rooster that crows just to wake his neighbors up. Saying that we must reawaken and keep ourselves awake, this man comes to my eye and ear as I think of our alerted efforts at North Carolina State University since the country turned two hundred years old. In particular, I am thinking of our work as a land-grant institution--a people's university--to grow healthy humanities programs off campus.

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This effort we have been making to extend our awareness and appreciation of the humanities across North Carolina since 1976 has been more directly related to our on-campus predicament, in fact, than to either the nation's grand Bicentennial or to our state population's urgent request that we come and talk about the enduring human questions in local communities from the Atlantic Ocean to the western mountains of the state. The program we created is now fully in place, but we got into the habit of growing healthy humanities seminars off campus because we as a faculty in the disciplines of the humanities and social sciences at NCSU had to find a way to be viewed as full partners in the on-campus, land-grant mission and politics of our traditionally agricultural and engineering institution in Raleigh.

The Dean of the NCSU School of Liberal Arts, later the School and now a College of Humanities and Social Sciences, Dean Robert O. Tilman, wanted to spend the last years of his career in a new venture that would merge his part of the University into the mainstream of its full mission. To do so he added active extension work to the already established teaching and scholarship commitments of his expanding faculty. The result was that in several years he and his Associate Dean William B. Toole, III--now the Dean--had been funded by the National Endowment for the Humanities to offer Humanities Seminars statewide in a program officially called Humanities Extension and modelled on the North Carolina Cooperative Extension Service. The new program from its inception has stood as a national model. Today its evolution has been felt both on campus and off, and its new public educational services, now available to the people of the state, are a model too. We came first to this work.

As our Yankee pioneer Thoreau says in Chapter II of *Walden*, the famous one called "Where I Lived and What I Lived For," we in the Humanities and Social Sciences faculty at North Carolina State Universtiy began this country's third century, so to speak, by going to the woods, to the citizens living out there. We wanted to "live deliberately, to front all the essential facts of life," those undying human questions and possible answers that are cultivated in our disciplines. Thoreau, as you may recall, speaks in a fashion that gives us a real challenge. He says:

> I did not wish to live what was not life, living is so dear; nor did I wish to practise resignation, unless it was quite necessary. I wanted to live deep and suck out all the marrow of life, to live so sturdily and Spartan-like as to put to rout all that was not life, to cut a broad swath and shave close, to drive life into a corner, and reduce it to its lowest terms, and, if it proved mean, why then to get the whole and genuine meanness of it, and publish its meanness to the world; or if it were

> sublime, to know it by experience, and be able to give a true account of it in my next excursion. (1617)

I repeat that by beginning to extend our humanities disciplines off campus after 1976, we at NCSU did not leave our teaching, scholarly pursuits, and service on campus unattended. In fact, the raised levels of intellectual energy generated in the faculty by "going to the woods" has been consistently felt in the vigor of our on-campus activities and accomplishments. For example, as our work with nontraditional adult students off campus has grown, we have also seen the establishment of a number of successful graduate programs in our College. We have seen too an increase in the average SAT scores of our entering undergraduates. There has been a diversification of our undergraduate offerings and degrees in response to our revitalized understanding of North Carolina and its place in the global economy and culture. A fine public recognition of North Carolina State University as not just a computerized cow college has also taken place. The most significant result of this change in public perception of our College has been the establishment of the NCSU Humanities Foundation. According to Dean Toole and the director of the Foundation, the success of the Humanities Extension Program has been the single most important factor in motivating both private and corporate donors.

How and why do we believe these and other positive developments have taken place on our campus and across our state in the last fifteen years? Something else Thoreau says in *Walden* comes to mind. In Chapter VII entitled "The Bean-Field," we find the following paragraph:

> This is the result of my experience in raising beans. Plant the common small white bush bean about the first of June, in rows three feet by eighteen inches apart, being careful to select fresh round and unmixed seed. First, look out for worms, and supply vacancies by planting anew. Then look out for woodchucks, if it is an exposed place, for they will nibble off the earliest tender leaves almost clean as they go; and again, when the young tendrils make their appearance, they have notice of it, and will shear them off with both buds and young pods, sitting erect like a squirrel. But above all harvest as early as possible, if you would escape frosts and have a fair salable crop; you may save much loss by this means. (1653)

Thoreau actually goes on to greater length in his next paragraph, but before I eventually follow him there, I want to use his instructions about raising and harvesting beans in the woods as a guide for growing healthy humanities programs out there in North Carolina and other states.

First: Plant and cultivate the common human questions in public seminars and workshops. Be timely in these offerings; Thoreau says to get the bean seeds in the ground by the first of June. North Carolina and Virginia, if it is true, have their own seasons for ideas as well as for seed. Germination and the eventual ingestion of the humanities topics are also sensitive educational developments. We have industriously attended to our ground by planting fresh unmixed seeds in their proper places. Our public seminars are held in libraries, schools, or county Cooperative Extension facilities. In each of these places we have a staff liaison who surveys the interests and needs of the clientele. Either from among our existing seminars or by developing a new offering based on a common local interest, we schedule and deliver each seminar at no cost to the general public. All Humanities Extension Seminars in North Carolina are free and open to the public. The freshness of the offering is dependent, though, on more elements than open access and the input of local citizens in selecting the seeds of thought to be sown and cultivated.

The faculty member or members who lead the four sessions of each seminar are at the current outer limits of their disciplines. Local discussion leaders are sometimes identified to spur or revitalize the conversational interchange based on the readings distributed for the sessions. And any video components that the faculty members may use are original productions--scripted, shot, and edited within Humanities Extension. When our program was initially funded in the 1970's, a complementary video production unit and staff were part of the package. It was the only way to begin. Our participants have enjoyed splendid reading, discussing, and viewing.

In a paraphrase of Thoreau's advice about what and how to plant, our public seminar seeds are selected fresh and unmixed before being planted in locally prepared soil. All videography is original; all readings are approved by the seminar leader(s).

Currently Available Humanities Extension Seminars	Faculty Leadership
America's National Security in a Changing World	Dr. Robin Dorff
Art and Literature	Dr. Max Halperen
Art History Reflections	Dr. Mary Coker Joslin
Small Town in American Literature	Professor Sidney
Knowles	
Creative Writing: The Short Story	Professor Lee Smith
Creation and Creativity: Artists' Retelling Timeless Stories in Visual Arts and Music	Dr. Mary Coker Joslin and Dr. David Greene
Look Homeward, Angel: Thomas Wolfe's First Book	Dr. James Clark
North Carolina Folklore	Dr. Carmine Prioli
The Literary Experience	Dr. James Clark
Literary Landmarks I	Dr. Linda Holley
Literary Landmarks II	Dr. Joyce Pettis
Literary North Carolina	Dr. James Clark
Communicating Across the Curriculum	Dr. Robert Kochersburger
Modern Sub-Saharan Africa	Dr. Risa Ellovich
North Carolina and the Civil War	Dr. Alan Downs
North Carolina Studies	Dr. James Clark
Religious Traditions of the World	Dr. Tony Stewart
Environmental Responsibilities: Public and Private	Dr. Erin Malloy-Hanley
The United States and Japan	Dr. Joseph Mastro
The United States and the Former Soviet Union	Dr. Joseph Mastro
The US, China, and Japan After the USSR	Dr. Joseph Mastro
World Literatures	Dr. M. Thomas Hester and Dr. Joan Stewart
Japan and China	Dr. Joseph Mastro and Dr. Burton Beers
Framework For Freedom: The US Constitution	Dr. Abraham Holtzman
The United States and China	Dr. Burton Beers
Cowboys of the Americas	Dr. Richard Slatta

Each of these seminars has a ten-hour format; usually the sessions are held for 2 1/2 hours an afternoon or evening for four weeks. Briefer formats are possible. All sessions are free and open to the general public. Our faculty belong to the College of Humanities and Social Sciences and are paid $200 for each seminar session they lead. We also pay them to develop new offerings and for all travel and materials needed for presenting and developing seminars.

Yet the most important element in this effort to cultivate the public mind may be the cooperation of the local staff liaison with our faculty. It is not customary, for instance, for a county Home Economics Agent and a University professor of Shakespeare, or Hinduism, or Soviet History, or creative writing to work closely together. But it does work. The Humanities Seminars we are currently prepared to offer in this way are these twenty-five. Faculty leadership for each seminar is indicated.

The second piece of advice Thoreau offers us in the husbandry of our seminars, particularly in the seedling stage, has to do with controlling worms. He frankly says to "look out for worms." He also says to resupply the vacancies caused by these very localized predators and hazards by "planting anew." In our experience, we consider a new seminar, however well it has been selected, prepared, and introduced, to be a seedling. In a particular county in central North Carolina, we have tried to introduce each new seminar that breaks through the ground. Our test plot and audience in Randolph County almost always show us where the cutworms have been at work. The gaps caused by these pests are promptly restored, based on the written and oral evaluations that come directly to us from our staff liaison and the pilot audience. And what are a few of the insects these local people identify?

The worms may be peculiar to our campus, or to the county, or to both. The wrong match of faculty-member-to-audience or professor-to-public-audience is the biggest worm. Another large one is the seminar topic itself, whenever the discussions tend to polarize the audience, to anger or madden participants. Our objective in each session of every Humanities Seminar we plant is to have ideas grow in the minds in a community through thoughtful discussions that may continue after the seminar itself has come to a formal conclusion. One other worm we have encountered I will call the money crawler. It is a professor who has seen our seminars as an easy way to make a little extra money--no more, no less. This worm is as harmful to our public educational efforts as another one. I'll call this one the humanities tapeworm. Its destructive work is done by making vital equipment break down at a crucial moment. And finally there is the local grubworm, a person on campus or off who thinks professors come or go into local communities for no other reason except to do intellectual or spiritual harm. Some of these grubworms may carry a banner that preaches sectarianism. Others may be against learning as opposed to training, and a few grubworms are simply proponents of basketball or some other popular passion.

I mention this grubworm colony last because it is really not a threat to our Humanities Extension Program these days. Our faculty has overcome even basketball! The seminars we offer have become more popular, as a matter of fact, as we have begun to send more than one faculty member to a given community during the scheduled activity. Nothing, we have found--not original videography, not verbal eloquence with or without substance--nothing meets the demands of the public's appetitie for healthy humanities discussions better than living, breathing, thinking faculty members who are well informed and delighted with the disciplines they profess.

The third thing Thoreau says about growing fine beans in the woods is said firmly: We must "look out for woodchucks that nibble away as they sit erect like squirrels." The woodchucks or groundhogs of our experience are chiefly budgetary creatures. They may stand remote or sit sedately as they nibble away or gobble up the buds and pods of our productions. The remedy for these nonlocalized but omnipresent beasts is diversity of funding for off-campus humanities initiatives. The overall budget of our annual operation is under $200,000. Our sources of revenue have become more varied as we have grown more healthy. Signs of healthy growth have preceded new budget diversifications in most instances.

With a secure piece of the state budget for education, a strong foundation, ample grants both private and federal, regular and generous corporate gifts, and an active in-house revenue account accumulated from the at-cost sale of curriculum materials related to public seminars, we have a complex funding formula that is hard on the computers but vital to our survival; as vital, in fact, as the splendid will of our faculty to work well in the woods.

The other monster woodchuck that has occasionally sat like a squirrel to devour our statewide success in the Humanities Extension mission is closer to home than the budgetary groundhog. This one is an occasional narrow-gauged administration for our program. We know from experience that the success of our work has been due, significantly, to the leadership given it by a broad-gauged or dual team of co-directors, one from the traditional humanities and the other from the social sciences. The breadth of our offerings and the diversity of our requests, not to mention funding, make the demands on our leadership team quite high and intense. To look at topics from two disciplinary perspectives--literature and political science, for example--is not only healthy and necessary, however. Running this statewide program ends up educating the administrators themselves. This adult learning happens in the exact same ways that the seminars we sponsor or lead move the minds of our public audiences.

But during the times of transition in Humanities Extension, the dual leadership has slipped from two people to one, and the stress on the program has always been acute. A related mistake in leadership is an equally undesirable woodchuck. Never should the dual leadership team be made up of faculty members who want to make all of the seminar honoraria and divide the money among themselves. It is just as destructive if one member of the team or the personality of a faculty seminar leader should form a cult following, a personal rapport with the seminar audience, a secular worship so intense that the subject he or she is supposed to develop intellectually never quite gets treated.

So beware of woodchucks in all appearances, but especially those that act the part of squirrels or prima donnas. In another chapter of *Walden*, by the way, the one called "Higher Laws," Thoreau recounts how, coming home late one evening through the woods after fishing, he had glimpsed one of the woodchucks his beans were supporting. As this thief stole across the pathway, Thoreau experienced the strange thrill of "savage delight," of wanting to catch and devour the groundhog raw. This sensation I have never had about the woodchucks of Humanities Extension, although I have spent many hours and miles on the public pathways of North Carolina after dark. Perhaps the reaction of my co-director and me to Thoreau's last piece of advice about managing the bean-field offers the best explanation of my restraint regarding woodchucks.

This fourth piece of wisdom is simply for us to take advantage of our production, in other words, to exploit our success. Thoreau says to harvest and distribute what we are growing for market as early as possible. By taking this opportunity, he observes, we can "escape frosts and have a fair and salable crop . . ." (1653). We have regularly taken this advantage with the competent support and assistance of a clerical staff skilled in providing educational services, keeping complicated books with software, producing and reproducing curriculum materials, and putting splendid public relations with faculty and the public one step ahead of everything else we attempt to do. Our "fair and salable crop" has, in fact, been given away to the people who have made our successful experience of going to the woods work so well. Here are the new seeds we have harvested and replanted from our Humanities Extension Seminars harvest.

Early in our seminars, we observed that secondary teachers were showing up in increasing numbers among our statewide clientele. Soon members in this subgroup asked if the seminars we presented to them could be used, in turn, for their professional certificate renewal purposes. Our answer was yes, and we cooperated with the North Carolina Department of Public Instruction to make the credit-granting process work to the advantage of middle and high school teachers certified in the humanities--especially language arts and social studies teachers. We were even able to waive the fees.

It was soon clear to everyone involved with preparing and presenting our seminars that the teachers who came to us for their required professional development were attracted by the intellectual substance of our various offerings. These men and women were learning something to teach. They were already wise to other workshops on methodology, process, and teaching strategies. Our faculty challenged our teachers' minds, not their hands. And to the nonteachers in our seminar audiences, there was a bonus too. They experienced the pleasure of exploring topics in substantial depth in the presence of one or more University professors and a group of local teachers they already knew. The total pleasure was ours as well as theirs, and this excitement did not stop at the door of the seminar room.

By 1980 the teachers in our growing network began to ask if Professor So-and-So could be invited to a particular secondary campus to make a specific presentation to a class of students. Again our answer was yes. We gladly said yes so many times that by 1985-86, the healthy seminar series we had grown in the woods had literally sent our runners in all directions. We stuck up posters for new seminars. A full slate of summer institutes for teachers came on line. The growing list of print and video curriculum materials for sale at cost to schools and libraries required a separate brochure. And the most exciting bean-field runner of all, a formal, corporately-funded Humanities Extension Public School OUTREACH Program blossomed. In just another year, 1986-87, we were scheduling up to as many as 200 visits by our teaching faculty to middle and high school classes in an academic year. During the summers of the most recent years, years of astonishing social and political changes around the world, some of the teachers who had inspired and depended on our expanding program have gone abroad on formal study tours with my co-director Joe Mastro. They made video and print materials that are now available across the state, a real educational service at a time when traditionally adopted social studies textbooks for much of the world have been outdated by conspicuous historic developments.

This growth has also changed us. For the first time we are producing both loose-leaf and bound textbooks to state specifications without direct regard to any of our seminars. Of course, the seminar program will carry on. But these adventures into standard textbooks with video components will be as forceful in their definition of our mission as the initial registration of teachers was in our seminars in the late 1970's. Nothing dies or dries up on our Humanities Extension vines nine days out of ten--proof that the model we have is adaptive, even evolutionary. Public support, broad-gauged administration, substantive offerings, diverse funding, and a video production capability--these help us harvest what we grow, quickly and often.

A special observation now follows about the ability we have exhibited to sustain changes at home and abroad, on campus and off, without being plowed under or overgrown. An apt educational adjustment has been made in the way we approach videography production. Aided by the gradual development of less complicated but more sophisticated cameras and editing consoles, we finally weeded out our professional video unit that had been planted alongside us in the beginning. In its place, as if a huge technology cutworm had come along in the night, we set out in our bean-field a video production unit led by a faculty member in the Department of Communication in the College. This person is not a member of our staff at present. We are enhancing his Department's production capacity by an infusion of revenue for equipment and a portion of his annual salary. He has been abroad on two study tours. He has already put his senior production students to work on our projects in a credit course. Today our original videos meet our public in seminars and in secondary schools and public libraries with the names of North Carolina State University undergraduates prominently featured among the production credits. Everyone gains from this evolution of our insistence on having original videotapes to use in all of our work.

At present these students are busy on a series of twenty-minute treatments of selected North Carolina novelists and poets. In this project the students get acquainted with the life and works of men and women such as Reynolds Price, Fred Chappell, Lee Smith, and Wilma Dykeman. The resulting tapes are as useful in my adult seminar about "Literary North Carolina" as they are in the public schools and libraries where they are accessioned as educational materials.

A list of our currently available original videography suggests the level of activity this part of the bean-field now supports. The price of each tape or unit is figured at cost, and the revenue we generate goes back into production of new or updated tapes and print materials.

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Talk About Writing: John Ehle	$ 20
Talk About Writing: Suzanne Newton	$ 20
Talk About Writing: Reynolds Price	$ 20
Talk About Writing: Lee Smith	$ 20
Thomas Wolfe: An Escape Into Life	$ 50

Call (919) 515-3451 for more information.

As an example of how a video component produced at our place is used in an adult Humanities Seminar, the following agenda for "*Look Homeward, Angel*: Thomas Wolfe's First Book" is given. I lead this seminar. Shot on location in Asheville, Chapel Hill, and at Harvard, its two-part video is a 1982 production that is still in service. It is the best work by our former video producer Kay Reibold. Wolfe experts Richard Walser, David Herbert Donald, and Richard Kennedy are featured. This videography has also been marketed internationally by Films for the Humanities at Princeton.

Humanities Seminar: "*Look Homeward, Angel*: Thomas Wolfe's First Book"

General Purpose of Activity

To focus attention on North Carolina's most famous writer. *Look Homeward, Angel* (1929) is an apprenticeship novel in which Thomas Wolfe's semiautobiographical hero Eugene Gant escapes family, hometown, and other restraints. This seminar features on videotapes Richard Walser, Richard Kennedy, and David Donald as well as Asheville, Chapel Hill, and Harvard University.

Agenda

Session One: Professor Clark will distribute copies of *Look Homeward, Angel* and chart the rich reading. He will discuss title and subtitle, principal symbols, the novel's division into three parts, and a relentless domestic struggle. 2 1/2 hours.

Session Two: Richard Walser on video catalogs the author's archives and the leading approaches to the novel that made Wolfe famous. The colorful survey brings the viewer up close to the fictional hero and this family in the boarding house called "Dixieland" in Altamont or Asheville. Fiction and life seem interchangeable. Professor Clark leads the ensuing discussion. 2 1/2 hours.

Session Three: Switching the focus to the education and creative development of Wolfe and his hero, Professor Walser is joined by Richard Kennedy and David Donald, biographers of the author. Wolfe's huge manuscript in time became the well-received novel through the influences of editor Maxwell Perkins. It shocked hometown readers in particular. Professor Clark explores these issues with the seminar participants. 2 1/2 hours.

Session Four: Professor Clark discusses selected chapters in each part of this classic about Eugene Gant's first twenty years. What explains the escape into life by Wolfe's hero or answers the timeless question: "How shall I live?" Eugene's mother Eliza counsels that we must try to love one another. The ghost of brother Ben, however, tells the young man: "You are your world." Discussion of this conflict of values concludes the seminar. 2 1/2 hours.

One of the sustaining features of the literary career and continuing fame of Thomas Wolfe is the abiding attention his fiction gives to the longing and promise of young people. The individual youth's dream of life is to be taken seriously, to be fully supported, if possible, Wolfe tells us over and over. This is how young people look homeward, by truly being supported to find themselves. And it is as true in Eastern and Western Europe today--Wolfe and his works are well known there--as it is in the American South or any other region. Young people, to paraphrase the opening page of *Look Homeward, Angel*, are our only really new magic in a dusty world.

The central, growing role of young people in the recent development of Humanities Extension is in keeping, I believe, with both the history of land-grant education and extension in this country and with Thomas Wolfe's tireless celebration of the ways youth work, dream, and play in order to revitalize our world. We need especially to focus on this aspect of our bean-field just now since it is so acceptable to condemn young people. Society wishes they would somehow be more than we have recently been raising or supporting them even to know how to be or to behave--or to dream of a literate, humane existence.

At the beginning of this century, a state and national movement among rural boys and girls that is now called 4-H came to fruition. 4-H has survived because of the visionary men and women at its helm who saw the same potentialities Wolfe emphasizes in young people. These early Extension leaders even insisted, in despair, that they may as well give up on the rural jaded adults and teach children how to make rural farms and homes into productive, healthy environments for the twentieth century.

In Humanities Extension at the other end of this century, we have remembered the young people--in the statewide public school OUTREACH Program as well as in the undergraduate production course that now originates our current videography. But we have not given up at all on the adult population that sustains our seminars and our array of support services for active teachers.

The quarterly newsletter we publish and distribute to North Carolina educators is called *We're Your Place*. Its content is generated both on campus and off. A current issue will feature a new seminar we piloted in Randolph County in April. The topic is "Enviromental Responsibilities: Public and Private." To staff this new offering we engaged faculty members from other Colleges on the NCSU campus, but an ethicist from our College of Humanities and Social Sciences led one of the sessions, and my co-director moderated the entire activity. We also worked with the local staff liaison to motivate county citizens to take their own active part in the discussions. This seminar's central question, of where the responsibility for protecting our natural environment lies, brings us back to Henry David Thoreau.

Before resorting to his words in order to conclude my advice about how to grow healthy humanities programs off campus, I will go over the ground we have covered one more time; (1) plant fresh, unmixed common seeds--the timeless human questions; (2) beware of localized worms that do their destructive work both above and below ground; (3) take out actively after all woodchucks, especially those that nibble away at budget diversity and administrative breadth; and last, (4) harvest early and often the life-sustaining produce in order to distribute as much humanities as the statewide program will bear. I have added a fifth piece of advice: In every stage of this work be mindful of young people as well as adults. I find it necessary to suggest, in fact, that one full session of every seminar or workshop we present be devoted to the impact of the topic on young people today. They are our proper study, whatever we are teaching or learning.

Now here is Thoreau. After planting, hoeing, harvesting, threshing, picking over, selling, and yes, eating his beans--after all that work and pleasure, he says to himself and to us:

> . . . I will not plant beans . . . with so much industry another summer, but such seeds, if the seed is not lost, as sincerity, truth, simplicity, faith, innocence, and the like, and see if they will not grow in this soil, even with less toil and manurance, and sustain me, for surely it has not been exhausted for these crops. (1653)

The future of the Humanities Extension Program at North Carolina State University and at places interested in this successful undertaking for the people living and working out in the state, off campus, depends significantly on the attention all of us pay to beans and the bean-field as well as to these other vital seeds, the seeds of human virtues. How we relate to our natural environment and to ourselves--surely our soil is not exhausted for this promising cultivation of the humanities.

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THE "HOW TO" OF QUALITY IN NON-TRADITIONAL PROGRAMS OFF CAMPUS

Martha Gurwit

Quality programs are the goal of educational institutions. With accountability again becoming a more prominent force in higher education, nontraditional/interdisciplinary programs at off campus locations must constantly be on guard to assure quality happens. This paper defines quality, applies these definitions to higher education, and outlines the "how to."

Introduction

Quality. (kwal'e te) n. 1. any of the features that make something what it is; characteristic; element; attribute 2. basic nature; character; kind 3. the degree of excellence which a thing possesses 4. excellence; superiority. . . . All of these definitions from Webster's *New World Dictionary of the American Language,* Second College Edition, are facets of quality in non-traditional programs off campus. They will be used in discussing the topic of this paper.

Definition 1. Features or elements are what is offered; degrees, programs, course sequence, class locations.

Definition 2. Basic nature is that it is a non-traditional program at an off-campus site.

Definition 3. Degree of excellence refers to the academic preparation of the faculty, teaching abilities, knowledge of adult learners and andragogy, as well as the knowledge, commitment, and dedication to new learning for the students.

Definition 4. Excellence is achieved when the administration, using interactive communication, supports the faculty, students, and staff

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> with the equipment and other necessary resources for it all to come together into the program.

The term non-traditional may be applied to programs which do not follow the regular semester/quarter schedule of an institution of higher education, either residential or commuter; are delivered in non-traditional formats; or have non-traditional methods of earning credit. Each institution defines its own unique aspects; the features must reflect the goals and mission of the particular institution.

Thus defined, the implementation is a matter of putting all the separate parts into practice. Just as one person cannot be all things to all people, neither can most educational institutions. They should know which programs and degrees they do best and do those which are assured to be quality. Acknowledgement of that quality will bring prestige, and with that prestige is one of the best recruiting tools available--satisfied clients.

Definition 1. Features

Degrees and/or programs offered at off-campus locations, while reflecting the main campus offerings and based upon its support services, are somewhat site specific. This is especially true when the distance from the main institution increases, i.e., foreign branches of United States universities. Off-campus locations where programs are offered should be chosen through a needs assessment prepared either by the institution's marketing department or a local firm employed for that specific purpose. Those identified needs should be addressed. This assures two benefits: students and community service. The needs assessment identifies the gap between what is and what is desired. After an area has been evaluated, then informed decisions about degrees and programs can be made.

Program sequence is usually determined by course content. However, there are occasions when content can be manipulated. In that event, it may be appropriate to accede to the needs of the learners when determining sequence; the course content could well be more relevant than if presented in the more traditional manner. As with most aspects of learning, adults have a readiness for acquiring certain areas of knowledge if the desired knowledge is presented when the learner realizes that need. Additionally, greater retention will occur. With greater retention comes better performance based upon the training which reflects on the quality measure. For if "quality is the end, then the means is accountability" (Mingle, 1989). And, accountability is again a prominent topic in educational settings (Ewell, 1991).

Edgerton (1991) has written that national standards are coming and will be based upon the National Education Goals which have been agreed to by the President of the United States and the governors at a summit held in 1989. Marchese (1991) stated "The problem is that the standards we deploy are often not notably high, evenly applied, or much discussed; they are various, idiosyncratic, and private--to outsiders, they look like cheese." If that is in fact the case, then quality cannot exist at all. To counter these perceptions would mean that we must raise our standards, apply them consistently across all aspects of education, and have open and meaningful dialogues between and among the many constituencies.

Definition 2. Basic Nature

Subsumed in the basic nature of non-traditional, off-campus programs are the several constituencies: students, faculty, programs, administration. Non-traditional education has already been defined; those elements will now be discussed.

At many off-campus sites, the director/coordinator wears a number of hats: plan curriculum, recruit faculty and students, select textbooks, locate classrooms, public relations, marketing. These duties are in addition to advising students and being the intermediary between the institution and the problems which arise among the various populations. Again, as the distance from the main campus increases and the tether lengthens, the chances of error or problems arising are exacerbated. To preclude these from occurring or to minimize the fallout requires an administration willing to engage in two-way communication, just as the director must do with recruits, students, faculty. What is required at one level of administration to ensure quality must also be part of the next level, either up or down depending upon one's relative position within the organization.

Characteristics of traditional and non-traditional learners were found to differ substantially on student structured and faculty structured scales on the Learning Preference Inventory in a study by Loesch and Foley (1989). They also determined that non-traditional students prefer to organize their own learning experiences while the traditional students prefer teacher directed learning experiences. Further, non-traditional students will choose the teaching methodology congruent with their learning preferences, if they have the opportunity. Therefore, one of the first steps in the "how to" with students might well be to help them, especially non-traditional ones, identify learning situations associated with their learning preferences. If this is done early, the initial learning experience would be more positive which would enhance confidence in their learning abilities. However, in time and with increased confidence those students might actually select their less preferred learning situations which would add to their learning repertoire. That information on learning preferences would aid faculty in preparing institutional materials and assignments. Kolb (1983) found that previous non-dominant learning orientations may become stronger in midlife to compliment the specialized learning patterns an individual had developed early in life; therefore, constant matching of learning styles may actually impede individual development. An awareness of these dichotomous views would alert administrators and faculty of possible problems in the learning environment; that, together with the awareness of students' level of maturity, could provide a more positive educational experience.

Adult, non-traditional students bring to the educational setting backgrounds as varied, probably, as the number of persons in the classroom. They often hold full-time jobs, have family obligations, and are active in their communities. They are 24-hour persons whose education is but one aspect of a larger goal to maintain and improve the quality of their lives (Gurwit and Whiteley, 1989). Students at off-campus sites are less concerned with the physical comfort of the classroom as with the quality of the instruction as it applies to their specific goals. They often endure limited library facilities which taxes adjunct faculty in planning their course of instruction. However, faculty who have extensive libraries in their subject area often make those materials available to their students. This tends to create first, a better, more stringent course of study; but, perhaps more important, an environment more conducive to learning through the sharing. The quality quotient increases.

Most frequently, quality is defined by the institution and judged by a group of experts based upon predetermined standards (Caffarella, 1988). However, there is another factor to be considered in the determination of quality: that perceived by the student. For even though the institution may consider a course to be of high quality and the written evaluations indicate a degree of satisfaction, the students may not, in fact, confirm that view when speaking with the administration or other students. In a study of participants in self-directed learning situations by Caffarella and O'Donnell (1991), focus group sessions were used to help determine the quality of a program. Five characteristics evolved: 1) it is judged on the basis of product and process; 2) the judgments evolve over time; 3) the learner is the primary judge, although other sources were also important; 4) it is not a precise judgment, but has variations and levels; 5) it has an affective dimension.

One of the participants in that study stated, "I can't define it, but I know it when I see it." This statement typifies the attitude most people have toward defining quality. Its attributes are dependent, for the most part, upon 1) which product, service, or program is being evaluated; 2) the particular attributes relevant to the person making the value judgment; and 3) the previous experiences of that person which are reflected in the decision of "quality," "non-quality," or somewhere in between.

Non-traditional education is finding increasing opportunities with the proliferation of additional methods of delivery. Distance education is a growth area which seems limitless as 1) technology improves, 2) the need to know "new" information immediately increases, and 3) costs to enroll in a traditional program of study multiply, both in time away from the job and the actual dollars. Distance education, by definition, means that the learner and the institution providing the instruction are separate, either in place or time or both. It is further characterized by non-conventional modes of delivery. Teleconferencing is perhaps the most popular with the corporate world. However, radio, television, cassettes, computers, and the more traditional print methods are part of this delivery system.

Moore (1989) said that distance education is a means of empowerment. He further stated that distance education can make any subject available to anyone who requires new knowledge. While Hall (1990) said it is the fastest growing instructional pattern in the world, White (1991) is concerned about how the learning outcomes are measured; predominantly the teaching is through imagery while the testing is paper and pencil. The quality of these programs is dependent upon the institution or organization producing them.

Definition 3. Degree of Excellence

All institutions have academic criteria which faculty must meet. Those are easy to follow. Oftentimes, harder to ascertain prior to actual employment are such traits as teaching ability, knowledge of the adult learner, principles of andragogy. Adult learners are not a homogeneous group. They place a high value on education as a means to gain knowledge but their decision is more probably based upon one of four factors: job change, job enhancement, self-improvement, or social contact. Their needs are to acquire self-esteem and self-actualization.

Quality teaching is viewed from three perspectives: 1) motivation--faculty arouses students' curiosity, encourages competence, promotes academic achievement; 2) organization--allows for variability, feedback, provides for cognitive growth; 3) personalization--aware of the unique student needs, individualizes material. When these are incorporated into the course curriculum and classroom behavior, there is quality teaching. To maintain a faculty who meet these criteria requires attention to the interaction between faculty and students, content of material to be presented, meeting with faculty to explain the policies, deadlines, and expectations of the institution. Feedback from the students must also be included; are they receiving the instruction required so that their educational goals are being met? Intervention by the administration, if needed, would increase the quality level.

Wlodkowski (1985) delineates the core characteristics necessary for a person to be a motivating instructor: expertise, empathy, enthusiasm, and clarity. When these attributes are brought to the learning environment, the faculty member has helped the students to gain self-mastery which is the art and science of andragogy.

Definition 4. Excellence

Institutional parameters first and foremost must deal with the mission of the college or university and those aspects necessary to maintain accreditation. Included, but not limited to, are: student services, library access, appropriately credentialed faculty, needed degree programs or other non-credit offerings, physical facilities, environment conducive to learning, evaluation feedback loop. When an institution has taken all the responsible steps based on an informed needs assessment, a quality program should be in place. When credentialed, dedicated faculty are added and the administration presents a caring atmosphere, the learning should be quality.

We know that a satisfied student will recruit for the institution. When quality programs are in place with quality instruction on-going, with an element of caring shown by the administration, off-campus, non-traditional programs will continue to proliferate, prosper, and prestige will be brought to that institution.

A Look Forward

Will the definition of quality change in the next century? Possibly, but it is more likely that the attributes will be interpreted using the then current values. Values will change just as the institutional ambiance will change. Arthur Levine in the opening address at this 1991 conference predicted that values held by students will shift so that they will identify with differences rather than the commonalities among them. Groups will be smaller; and even though people will be in the same space, they will not be together. Possible reasons for change will be the demographic shift; leadership will become more caring which will be demonstrated, partially, by more open communication. Funding sources and the taxing of scholarship monies used for non-academic expenses (room, board, travel) will continue to be of concern; however, that might lead the institution to involve itself more in non-traditional education and distance learning. Students in the future will tend to be more involved in service activities and less in fraternities or sororities. They would take a more political and intellectual stance while at the same time becoming less religious. There would be more part-time students but fewer degrees. New educational institutions would move into areas of need necessitating the development of new learning and delivery modes.

Increasingly, corporations will have more in-house training; but that, too, will open avenues for educational institutions to increase their non-traditional programs at off-campus locations. I foresee the quality in these non-traditional programs and degrees improving as their value to the learners, businesses, and institutions becomes more widely known and accepted.

The "how to" of quality will require open communication among administration, faculty, and students; an understanding of adult learners and how they learn best; an environment that promotes trust and confidence in students of their abilities to learn new information.

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A MODEL FOR ESTABLISHING A QUALITY NONTRADITIONAL OFF-CAMPUS CENTER

P. Craig Wilson

The demand of non-traditional students for courses and degree programs away from the university setting has forced the academic community to rethink traditional academic values and established educational doctrine (Schallenkamp and Kaufmam, 1988). As off-campus programs proliferate, practices and procedures involved in the delivery of off-campus programs have become more innovative and have moved farther away from the academic norm. As the consumers of the off-campus programs demand outcomes that are not necessarily consistent with the established tenants of quality, the issues of the quality of part-time students, faculty, student services, facilities, class formats, curriculum, academic services and the like have been raised. As the gap between on-campus traditionalism and off-campus innovation grows, so does the issue of quality.

The need for additional courses and degree programs to be located off the traditional college or university campus has reinforced the desire to ensure that the student who takes courses and/or completes a program at an off-campus site receives an educational experience that is consistent with the established definition of quality for on-campus courses and/or programs.

> Of all the problems discussed . . . none received more attention and concern than those relating to program quality . . . . Indeed, we were struck by what appeared to be a sense of urgency at all levels . . . for mechanisms, criteria, and procedures to assess and assure the quality of nontraditional degree education (Bowen, Edelsterin, and Medsker, 1979).

The greatest amount of graduate study takes place off of the traditional campus. In the 1986-1987 academic year, off-campus students accounted for 54

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percent of the total graduate enrollments. The George Washington University is not atypical. The University established the Hampton Roads Center over twenty-five years ago to serve the growing demands of non-traditional students.

The study originated with the concept that off-campus centers are often developed without considering the difficulty of building in the resources for establishing and maintaining quality. One method of planning for quality was to examine the aspects of quality that may or may not exist at current off-campus centers. Such results can be the blocks from which a quality off-campus program can be built.

The purpose of the research was to compare the quality of on-campus and off-campus center graduate education programs offered by the School of Education and Human Development of The George Washington University both on-campus and off-campus at the Hampton Roads Center. The specific research objectives were to:

1. determine if there was a significant difference in the quality of on-campus and off-campus students;

2. determine if there were significant differences in academic credentials between on-campus and off-campus faculty;

3. determine if there were substantial differences in academic programs on-campus and off-campus;

4. determine if there were discernible differences in academic support services on-campus and off-campus;

5. determine if there were noticeable differences in physical facilities in providing for students needs on-campus and off-campus;

6. determine if there were specific differences in student services offered and utilized on-campus and off-campus;

7. determine if the administrative structure between on-campus and off-campus was operationally and substantially different;

8. determine if there were significant differences in student perceptions of quality in their educational experience between on-campus and off-campus students; and

9. determine if there were significant differences in the faculty perceptions of quality in their educational experience on-campus and off-campus.

The study was designed to compare the quality of the on-campus and off-campus graduate educational experience. The study was limited to the programs being offered by the School of Education and Human Development of the George Washington University both on-campus and off-campus at the Hampton Roads Center.

Graduate students enrolled in graduate courses in the programs offered by the School of Education and Human Development, both on-campus and at the Hampton Roads center, were selected as the population for the study. Information on students was obtained through a survey and from official student records. Additional information on the strengths and weaknesses of the Hampton Roads Center as perceived by current students, center alumni and drop-outs or non-persisters who had attended the center over a three year period was obtained with a survey (Fantaske, 1991).

Faculty members, both full-time and adjunct, teaching graduate courses offered by the School of Education and Human Development, both on-campus and at the Hampton Roads Center, were selected as part of the study. A survey was sent to faculty, teaching both on-campus and at the Hampton Roads Center simultaneously during the Spring 1990 semester. Besides the survey, additional data were collected from the University Bulletin, curriculum vitae, the on-campus and off-campus schedule of classes and non-automated faculty records.

Academic program data were found in course syllabi, course outlines, the University Bulletin, and individual program brochures. Support services data were gathered from official publications, brochures, literature, and personal observations consisting of in-person office visits coupled with informal interviews.

A descriptive analysis, the one way analysis of variance (ANOVA), and the Chi Square test were used in analyzing student, faculty, academic program and services, and student services data.

Conclusions

The conclusions drawn as a result of this study were:

1. The off-campus students were significantly older and had been out of undergraduate school considerably longer than their on-campus counterparts.

However, they entered their graduate programs without significant differences in their undergraduate grade point averages. The performance of the off-campus students, as measured by their graduate school grade point average, was not significantly different from those on-campus students. Participating faculty members tended to perceive no significant differences between on-campus and Hampton Roads Center students. Therefore, while the off-campus student population was older and had been out of school longer, they were as academically prepared and performed as well as the on-campus students.

2. There were no significant differences in credentials between on-campus and off-campus faculty. However, the percentage of adjunct faculty teaching off-campus was significantly higher than on-campus. Both on-campus and off-campus students perceived faculty to have and to demonstrate the quality characteristics they deemed important. Therefore, while more off-campus faculty were basically part-time, the quality of instruction was not significantly different than the on-campus students received.

3. Courses taken off-campus tended to be perceived by off-campus students as being of a higher quality than on-campus students viewed their courses. Course examinations taken off-campus were perceived by students as being of a higher quality than on-campus examinations. Conversely, student reports and papers were perceived by on-campus students as being of a higher quality than was the case with off-campus students. Faculty perceived off-campus courses to be of a slightly higher quality than those they gave on-campus. Although there were apparent differences between the off-campus student and on-campus student perceptions of quality, students performed equally well in their programs. One can conclude that there was a high level of satisfaction and a perception of high quality by on-campus and off-campus students of course work and related academic activities.

4. Off-campus academic programs were, in terms of courses offered, within specific graduate degree programs parameters and identical in curricular content to those on-campus. However, there are many differences in academic programs between on-campus and off-campus. There was a limited availability of faculty counseling and academic advising off-campus. Additionally, the availability of student computer time was considerably less off-campus. Based on these prominent differences, one can conclude that there were major differences in academic programs between on and off-campus programs. However, since the off-campus students' academic performance was equal to the on-campus student, one can also conclude that although the differences were meaningful in themselves they were not significant in terms of affecting

student performance. This may be attributable to the fact that off-campus students tend to be older and more experienced and may well have other support systems that "fill the gap" that was served by on-campus student support services.

5. Although off-campus academic services were of a distinctly lesser quality in terms of general educational, vocational, and personal counseling due to a lack of staff personnel with appropriate qualifications and job responsibilities for these specific services, students performed equally well measured in terms of academic achievement. Therefore one can conclude that although these services were in themselves considerably different, they were not significant in terms of affecting student performance.

6. Off-campus financial aid and library services were of a concern for current students, alumni and non-persisters. Non-persisters felt that student advising and class scheduling were lacking in quality off-campus. Current students felt that the telephone registration system was a significant problem off-campus.

Summary

In summary, the research revealed significant information about the off-campus students. The off-campus student 1) was older; 2) had been out of school longer; 3) was taught by a higher percentage of adjunct faculty; 4) had academic services that were of a distinctly lesser quality; and 5) had more limited academic services than on-campus student. However, in spite of these differences, the off-campus student performed as well academically as the on-campus student.

The study provided the structure for a model for study. Throne, in 1988, proposed a model for assuring quality in off-campus credit programs. Her model was developed for use when moving programs from the central or parent campus to existing auxiliary university campuses. Although her model did not address the issue of an off-campus center, it provided the basic framework for building a basic off-campus credit center model.

The basic model, found on the following page, can also function as a checklist to determine if all quality criteria has been met when establishing a quality off-campus center or as an assessment tool in measuring quality at existing centers.

Basic Model for Establishing
Off-Campus Credit Courses

Model Requirements

Academic Facilities

Facilities for off-campus centers should be equal to those found on campus. All facilities should have access for wheelchair resident handicapped students. Adequate and safe parking should be available for all students, adjacent to the classroom facilities, when possible.

Academic Student Support Resources

Academic student support resources such as a library, computer lab, copy machines, fully-equipped classrooms, facsimile machines, and the like should be equal to or better than those found on campus. Off-campus library resources should be enhanced through interlibrary loans with main-campus libraries, and local colleges and universities, facsimile journal services with the main-campus libraries, and other electronic library technology.

Administrative Support Services

Institutional

The functions of a higher education administrator, specific program administrators, faculty support, alumni and public relations, student academic services, student support services, and other administrative functions should have an off-campus counterpart who is responsible for coordinating the specific functional activities at an off-campus center.

Student Services

All basic student services should be duplicated at the off-campus center. The person filling these positions should have the primary responsibility for performing that service at the off-campus center. The basic administrative student services as a minimum that should be replicated off-campus are admissions counseling, registration information, student accounts, veterans' affairs and financial aid. Other student services should either be resident at the off-campus center or available at an external agency in close proximity to the off-campus center.

Basic Academic Requirements

Academic Programs

Equal admission requirements must be established and followed by the university and schools for all students applying for either on-campus and off-campus courses or degree programs. Equivalent program requirements and curricula must be established by the schools for on-campus and off-campus. Standardized syllabi, papers and reports, examinations and grading requirements for on-campus and off-campus courses must be followed. A resident faculty advisor for each academic program should be provided at the off-campus center.

Academic Faculty Members

Academically qualified faculty must be available for off-campus credit programs. Adjunct and full-time faculty should provide posted office hours for student academic counseling. Faculty should be provided an office either private or shared.

Self-assessment

Periodic scheduled self-assessment studies should be conducted in order to assure that the quality of off-campus academic experience is equal to or greater than that found on-campus.

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SERVING CORPORATE NEEDS THROUGH PARTNERSHIP MODELS

THE COMPASS PROGRAM
- CHARTING A NEW COURSE FOR THE FUTURE -
A COOPERATIVE EFFORT OF COLUMBUS COLLEGE, IBM AND TOTAL SYSTEM SERVICES, INC.

C. Leary Bell
Thomas Z. Jones

Columbus College, the IBM Corporation and Total System Services, Inc. (TSYS) have joined together to create a new applied computer science curriculum tailored for the programming and system needs of companies that maintain and service large databases in business mainframe environments. Additionally, the three are cooperating to design new and innovative ways to deliver this curriculum so that students not only receive an excellent education, but receive valuable work skills training at the same time.

Introduction

According to Darlene Burnett, an IBM Corporation consultant, "U. S. corporations spend over $60 billion annually training their work forces, the vast majority of which goes toward new hires. Whereas, American colleges and universities spend less than $35 billion annually preparing our people for the work place." The Hudson Institute reports that 78% of the U. S. work force possesses low level skills. Yet low level skills are needed for only 40% of the available jobs. Therefore, business must endure the cost of training-up the 38% who are available for work, but not prepared to perform the required tasks.

The U. S. Department of Labor's Bureau of Labor Statistics projects the demand for computer science graduates to increase by 75% over the next five years.

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This is coming at a time when the number of high school graduates with adequate preparation in mathematics and science is steadily dropping.

The days of businesses getting by on sheer talent alone have gone by the wayside, replaced by the need for people and systems employing sophisticated processes which are continually improving over time. Just as it is no longer possible for football players just to have great hands and a knack for being in the right place at the right time, they must also condition themselves year-around because the level of competition demands it. A few distracted months and someone new is on top.

Today our country's competitors in the business world reach around the globe and employ work forces that are 100% literate. These nation-states work around the clock to produce high quality graduates who, in turn, produce high quality products and services. Our competition is technologically fluent and in many instances is busy building products which are many years more advanced than ours.

The harnessing of information and using it to satisfy customers will ultimately define who triumphs in business. In this, the U. S. still enjoys an advantage in computer software development. However, in order to retain this advantage, it is time now for them to employ leading-edge technology and systems design. Systems must be designed to be both powerful and flexible. They must incorporate processes that lead to the incremental improvement of the system over time. They must be capable of perfection!

American colleges and universities must take responsibility for producing this expertise and making it available to business. It must be in their "heart and soul" if they are to become true partners with business. The Columbus College COMPASS Program represents a venture into this new world of collaboration between business and higher education to increase the competitive nature of business. Specifically, two international businesses (TSYS, Inc. and IBM Corp.) and Columbus College plan to define and implement an information technology program that is relevant to the work place and which will produce graduates who will require minimal on-the-job training. Graduates will understand both the design of powerful, flexible systems and the use of leading-edge technology.

Background

The idea for the COMPASS Program grew from a highly successful Quick Start Programmer Training Program that Columbus College undertook for TSYS in the fall of 1990. TSYS, because of their dramatic growth in the credit card processing industry, experienced a severe shortage of qualified computer programmers. The College's Department of Mathematics and Computer Science packaged and delivered seven of its established and traditional computer science courses in an unique format to meet TSYS's urgent training needs. One hundred students participated in the program. They were chosen from approximately twelve hundred applicants who were evaluated and screened with the assistance of the Georgia Department of Labor. The students were provided a highly concentrated (six months in duration) and rigorous education in the fundamentals of computer science, and programming in COBOL and Assembler languages. A significant part of the program's success was due to the fact that TSYS made available to the College its mainframe, work stations, and software in a specially designed training center. This allowed for instruction to take place on the same systems that the students would encounter later on the job, thus eliminating the need for lengthy and costly proprietary training after the students completed the courses.

The Quick Start Programming Program was the first white collar training program ever conducted under the auspices of Georgia's Quick Start Training Initiative and was so successful that it won the U. S. Department of Labor's highest award for innovative training programs, the LIFT Award.

The success of the Quick Start Program caught the attention of other computer-based businesses in the Columbus area. As a result, the College began to explore new ways in which it could better serve the educational and training needs of these businesses; hence, the establishment of the COMPASS Program.

The COMPASS Story

The COMPASS Program at Columbus College is a collaborative venture of the College's Department of Mathematics and Computer Science, Total System Services, Inc. and the IBM Corporation. The Program is designed to produce graduates in Applied Computer Science who not only possess a top flight education, but who already have practical, job-related skills necessary to be immediately productive in the work place.

The Columbus area has more IBM mainframe companies than all other cities in Georgia combined, outside of Atlanta. Thus, the computer-based information processing industry is truly the most dynamic and growing segment of the area's economy, and its continued growth and future seem destined to establish Columbus as a "Data Basin." Yet, an acute shortage of highly skilled computer programmers exists in the Columbus area.

Following on the successful Columbus College-TSYS Quick Start Training Program and fueled by a keen interest from other businesses and the IBM Corporation, the College established the COMPASS Program to address this manpower shortage.

As part of the Program, IBM has made available to the College almost $2.5 million in grants and discounts for equipment, software and services. Included in this package are seven LAN kits of twenty-eight 386-type state of the art IBM PCs (196 PCs) as well as IBM's best-of-breed business environment production software. This is the same software currently being used by Columbus area mainframe companies, as well as almost all Fortune 500 companies across the nation.

TSYS has made available the use of their largest IBM mainframe computer, a data center, and other technical support services so that the PCs at the College can be networked to the TSYS mainframe. Consequently, Columbus College now is able to replicate the modern, business computing environment on its campus.

With the above hardware, software and support services, the College plans to deliver two degree programs in applied computer science: an associate in applied science degree and a bachelor of science degree. The curricula of these two programs will be molded with the assistance of an Advisory Committee comprised of representatives from local businesses who hold COMPASS Program membership.

To hold COMPASS Program membership, businesses must agree to fund sponsorships which will be made available to students enrolled in the academic programs. Sponsorship funds will cover the costs of tuition and fees, books, and room and board. In turn, members will be involved in the selection of sponsorship recipients from a pool of qualified applicants. While enrolled in the program, sponsored students will work for sponsoring businesses as part of an internship requirement built into both academic programs. And, after graduation, students will be guaranteed employment with their business sponsor.

Another unique aspect of the COMPASS Program is that it will be on a fast track. The Program is designed so that all requirements for the associate program degree will be completed in a thirteen-month period, and the bachelor's degree in about twenty-seven months. Students will be in class or laboratory for thirty-five to forty hours per week, year around. Consequently, COMPASS students will not follow the traditional college calendar. They will form a special population at the college which will move through the curriculum as a group in lock-step fashion, much like the models followed by many professional schools such as law and medicine.

Students completing the associate degree may choose to continue in the bachelor degree program or begin work for their sponsoring business. For those choosing to work, they will be afforded the opportunity to complete the advanced degree on a part-time basis with financial support from their employers.

The COMPASS Program will begin in fall 1992 with a planned class size of fifty sponsored students. At present, business sponsors are being identified, applications from prospective students are being accepted, and the Advisory Committee is being formed. The response to Columbus College's COMPASS Program has been overwhelmingly positive from all sectors of the College's service area.

Future COMPASS Activities

Once the computer science programs are established and operational, the College plans to expand other activities and services as part of its COMPASS Program. COMPASS will develop and deliver a broad array of credit and non-credit short courses and workshops for mainframe businesses throughout the Southeast. Also, plans are under way to make the College's equipment and software available to businesses for collaborative research and development activities.

In addition, COMPASS activities will not be restricted to computer science and programming; the College plans to make use of the new IBM equipment and software and TSYS mainframe capacity to enhance its other academic programs and services. For example, the College's Student Academic Support Center staff is developing a comprehensive computer-based tutoring service for all students; the English faculty plan to integrate word processing in their courses to enhance the writing skills of students; the computer information management faculty of the College's Abbott Turner School of Business are developing new research topics for themselves and students making use of the new software; the science and education faculty are planning summer workshops for school-age students and teachers on the use of computers in learning and teaching science to our elementary and secondary school students; and the College's Computer Center staff is currently working on networking all computers on campus to the COMPASS computers so that all faculty, staff and students at the College will have access to this new software.

Conclusion

In general, the characteristics of the Compass Program and its related activities will involve teaching the theoretical foundation of effective information technology design as well as the actual development of working skills that all college graduates will need in order to enter today's marketplace. The collaborative nature of COMPASS affords businesses the opportunity to play an active role in defining what knowledge and skills they want in their future work force, and it provides the College with the best-of-breed IBM equipment and software to ensure that its programs produce highly educated and skilled graduates. Indeed, the COMPASS Program is "Charting a New Course for the Future": a unique collaborative partnership of business and education!

PERSONAL AND PROFESSIONAL: A FOLLOW-UP ANALYSIS OF THE OUTCOMES OF A WORKPLACE MASTER'S DEGREE PROGRAM

John R. Goss, III
Samantha Craig

A examination of learners' experiences in a nontraditional Masters of Human Resources degree program revealed how perceptions of the outcomes realized from their participation altered their personal and professional perspectives, and suggests that conflict between organizational cultures needs to be accounted for and addressed by program developers and deliverers and by employers. Changes in participants' perspectives with regard to the value of the educational experience can be linked to organizational cultural discontinuities between the expectations of the workplace and of the classroom.

Partnerships between colleges and universities and corporations and businesses can be viewed as cost effective and high quality responses to employees' training and development needs.[1] Likewise, the shared resources of the educational and corporate communities (the availability of high quality instructional staff to deliver organizationally-specific, on-site programming to a ready clientele) can be seen as an efficacious means to serve the needs of both the sponsoring organization (e.g., training and development) and the university (e.g., increased FTE's).[2] But while the economic needs of both employers and institutions of higher education may be met through partnership arrangements, workplace program marketers and planners must also be aware of the impact of the social environment on learners in company-sponsored degree programs.

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This paper will examine the outcomes of a particular company-sponsored Master's degree program in terms of the changes in participant perspectives resulting from their participation in the program, and will link these changes to perceptions of cultural discontinuities between the respective cultures of the company and the university offering the program.

Although the concept of "organizational culture" has been widely used in human resources management in recent years,[3] its "creation" sometimes proves problematical when it must overcome the clash of opposing organizational cultures and resistance grounded in learners' expectations. This paper examines this clash of cultures from the perspective of "cultural discontinuity,"[4] and reveals the value of recognizing the impact of cultural *discontinuity* in attempts to create, and in resistance to, a "learning community." This cycle of change and resistance can be conceived of as the dialectic of experience.

The "Learning Community"

A partnership agreement between The American University (AU) and a major high technology company (HTC) in the Washington metropolitan area was entered into in 1989 to offer the AU National Training Laboratories (NTL) program to eighteen employees of HTC. Participants, chosen from among applicants drawn from two of HTC's divisions, were selected to move through the Master of Science in Human Resources (MHR) program as a cohort. All were technical personnel, some of whom held some management responsibilities within their particular work-groups. These participants were enrolled in a MHR degree program, with most courses offered at the company's headquarters offices.

The MHR degree program was designed to enhance the management skills of HTC's employees, improving their effectiveness in managing organizational change and increasing organizational competitiveness, while preparing them for future management roles within HTC. These objectives were to be achieved largely through the creation of a "learning community" composed of members of the MHR cohort. A additional objective was to improve technical employees' interpersonal skills and to help them broaden their understanding of their roles in the larger organization.

The "learning community" was intended to be a supportive peer group designed to enhance the learning experience of participants through the sharing of particular knowledge specific to individuals, yet not shared by all, as well to encourage a spirit of community, of shared enterprise, among cohort members. Development of the "learning community" was to be facilitated by an AU faculty member, who served as the academic advisor (and also an instructor) to the group. In order to create "community," specific time slots were set aside as "community time" throughout the 18-month program. During community time, participants were expected to address issues relevant to the group as a whole, resolve problems that were believed to inhibit the growth of the learning community, and create a sense of interdependence among members of the cohort. In short, community time was designed to create a "culture" within the group that was shared by members, enhancing the supportive atmosphere central to the success of the MHR program; "community time" was one opportunity to put human resources skills into practice.

Corporate, Collegiate and Community Expectations

Cultural discontinuities experienced by members of the cohort and members of the faculty can be characterized, first, as those stemming from differences between the expectations of HTC's corporate culture and those of the University, and second, those stemming from role expectations associated with the respective social positions of various players in the learning group. The impact of these discontinuities can be observed generally in participants' assessment of the learning experience, particularly in their comments regarding the "learning community."

Corporate and Collegiate

While it should be expected that any group of individuals which shares a common workplace and task would also share a common orientation (culture) toward the organization, the power of such a shared culture to influence the behaviors and perceptions of these same individuals in a supposedly distinct learning situation should not be underestimated. The success of the learning community, that is the learning community as a wholly different culture, is influenced in large measure by the relative hold of the corporate on individuals in a learning group.

In the case of HTC employees, a strong corporate culture pervaded the group. HTC is organized functionally; that is, employees are grouped into "systems" of marketing, sales, technical and support personnel which focus on particular product lines. While members of the MHR cohort represented several "systems," each shared the "team orientation" characteristic of HTC's corporate culture. HTC's team orientation required members of systems to work cooperatively and collectively toward a specific goal, yet independently as experts in particular technical or specialty areas. The shared "goal" of a particular system served to focus members on their respective tasks within the system; however, the specific-task independence members, although exercised *within* the particular system, did not engender the creation of "community" in a holistic sense. Functional integration and personal independence characterize the HTC culture, a kind of *gesellschaft* or association between members of a system.

The AU/NTL concept of culture was not "function-oriented" so much as it was "process-oriented": the learning community was expected to be a community in the organic sense. A common culture was expected to emerge defining the learning community, and it was expected to characterize an interdependence among members directed toward achieving specific learning outcomes. The process of "creating culture" was directed at establishing expectations and norms among members about the nature of interdependence by discussing shared problems which inhibited achieving community. The "goal" of the learning community was a *process* not a *product*, an educational *gemeinschaft* among members of the cohort.

Difficulties arose for participants in making the transition from the culture of the workplace to that of the learning community. The familiar exercise of professional independence, contrasted with the new expectation of collective interdependence, was central to this difficulty. As one participant put it, community time represented what seemed to be a conflict between the expectations of faculty and the expectations of learners: a conflict between what learners believed worked for them and what someone else thought should work for them.

> In community time we went for [the advisor]. He had his own personal agenda that was why he wanted us to get together, and although we resented that, we also tried to stop him a couple of times when we thought we didn't need this. We socialize on the job; we see each other at work all the time; we eat lunch together. Community time might just try to stir things up. . . . We felt bad as a group, then we'd try to figure out "Why do we feel bad?" -- because he [the advisor] isn't getting everything out of it he wants? . . . So I think community time was maybe something that our group didn't need, or chose not to participate in, because of our close contact.

Community time was an ambiguous concept for members of the cohort. It seemed to lack definition, and as another participant expressed it, the group seemed angry about being forced to participate:

> Community time could not be defined. No one wanted to be there and a lot of anger was generated about it because no one understood what it was supposed to be. It seemed to be a contrived situation.

Forced interdependence seems to conflict with members' expectation for independence within the group.

Cultural discontinuities emerging from differential sets of expectations, based on members' experiences, shaped their concepts of the "learning community" and their expectations of "community time." The *gesellschaft*-orientation class members brought with them into the learning situation conflicted with the *gemeinschaft*-orientation of the AU/NTL program. The functional *associations* between individuals within the corporate system were based on the professional independence of members' professional (social) roles. Independence of individuals' actions within the system was a function of their role-specific skills which, while inter-related with others' role-specific skills, were distinct from other system members' functions. On the other hand, the AU/NTL expectation for an organic tie among members in the learning community, the expectation that the shared learning experience should engender the development of a kind of "moral community," required class participants to adopt a different, indeed an opposite, set of expectations from those they employed in the workplace. The functional interdependence of the workplace was to be replaced by the organic interdependence of the learning community.

The strength of the workplace culture, and the extent to which that culture had been internalized by the learners, made the creation of the learning community especially difficult.

> Community time, for our group, was pretty much a waste of time. . . . It seems to me that it would have been helpful for a group who came together and had to get familiar with the group. But for our group, we saw each other every day, and to see each other again for two hours after just having class to discuss problems or whatever about the group, it just didn't seem to do much for any of us. . . . The biggest problem discussed was how much everybody hated community time. And that problem was solved by adjourning community time.

Participants tended to focus their reactions to community time on the structural aspects of the experience. Rules, agendas and expectations imposed on the group ran counter to members' expectations of how such a group should work. These assumptions about the importance of the independence of individuals were formed, in large part, of their experiences at HTC. This participant's comments summarized these feelings.

> The community that was established was established according to [HTC] rules. For a group that didn't know each other, community time

> would have been more important, for those who need the encouragement of the group. But for us, it was mostly frustrating. We didn't know what we were supposed to do.

Those accustomed to HTC's culture, a system of loosely coupled independent professionals, found community time difficult to understand because they believed AU/NTL expected the "community" to emerge through structured interaction.

> I think community time was intended to be . . . a place where you talked about school, and got excited about things and dealt with the academic environment. I have a sense that community time was intended to be like a student activity. . . . There is difficulty in trying to structure this kind of thing. . . . I also think that we were all [HTC] people may have inhibited our ability or willingness to be as open as we might have been had it been a more traditional AU/NTL group.

Differing concepts of "community" as held by members of the HTC group and members of the AU/NTL faculty defined the discontinuity between cultures experienced by the group. The *gemeinschaft*-orientation characterizing the faculty was superseded by the *gesellschaft*-orientation of the HTC employees group. The "learning community" became simply another "HTC community," and as such, achieved little more than the transference of the HTC mindset to the educational setting.

The significance of this kind of institutional isomorphism as it relates to the effectiveness of the educational enterprise is that the AU/NTL program, designed to prepare individuals to engage in more creative interactions within the organization and directed at achieving organizational change, was subjugated to HTC-grounded cultural assumptions. The power of the HTC culture to overwhelm that of the classroom suggests that for the AU/NTL experience to be effective, culture change must first occur within the learning group; this is particularly important when the entire learning group is drawn from the same organization, particularly one with so powerful a cultural pull on its members.

Roles and Expectations

Like the conflict between corporate and collegiate concepts of community and their effects on the learning group, participants' social roles and the expectations incumbent to those roles also played an important part in shaping individuals' perceptions of the learning experience. Actors' social roles were particularly important in this case: individuals conceived their identities in the organizational context. This particular cohort was composed of HTC employees and, in some cases, these employees' supervisors. The presence of individuals who had some sort of institutional authority over others at the workplace created a dynamic that affected the development of the learning community. Again, the isomorphic tendencies of HTC culture emerge.

The MHR program is designed to expand participants' interpersonal skills, and the course work is designed to incorporate this process. HTC is not a highly interpersonal environment, and these skills are not valued in managers and supervisors. The result is that employees are unaccustomed to opening up around their supervisors at work, and were equally unlikely to do so in class.

The supervisors in the class acknowledged that their presence may have had an effect on those class members whom they supervised.

> I have the sense that, even though we talked about it a lot and we worked hard on it, the issue of level was always there. I'm talking about my level compared to the level of other people in the program. . . . I don't think I felt much of an inhibition around that, but the rest of the class did. . . . But I put that on everybody else. People who couldn't deal with me as me, and who were always aware of my organizational position [just have to learn to deal with that].

Although this supervisor recognized that his institutional authority may carry over into the classroom, he is also quick to point out that learning to deal with that phenomenon was clearly the responsibility of those in the class who were his subordinates. However, another participant (not a supervisor) commented on the behaviors of the supervisors, noting that sometimes subtle communication was used to reinforce the superior/subordinate relationship.

> They would say this person or that person works for me. Well, this was class, and they didn't work for him there. I don't know whether it was to remind everybody that they worked for them or what, but it was never challenged.

Others who were not supervisors also noted the awkwardness of the situation, suggesting that the presence of supervisors in the class did inhibit their participation.

> I held back a lot because I was going to school with my boss. But it was also because of the way [HTC] works. I do feel I would have gotten more out of the program if I could have been more open.

Participants felt that the courses (including community time) might have been more beneficial if members of the class were more willing to open up and trust one another. Differences in social roles between supervisors and employees inhibited that process. Again, the HTC corporate culture tended to inhibit members' interaction with one another.

Changes in Attitude or Changes in Latitude?

Did the MHR program at HTC achieve its objectives? Did participants develop greater interpersonal skills, and improve their effectiveness in managing organizational change and increasing organizational competitiveness? Yes and no.

Although the program was marketed as a way for HTC to prepare tomorrow's managers, participants recognized that HTC's mode of operation did not recognize the MHR degree as a fast-track to management. HTC values broad knowledge of the organization in those it promotes, and the MHR program participants were expected to follow the traditional path to management positions. The degree itself was seen as a kind of insurance policy in the event of corporate downsizing. In terms of changes in an individual's organizational latitude, the MHR program meant very little.

Despite this somewhat demoralizing realization, participants universally acknowledged the personal benefits that the MHR program offered them. Over and over those interviewed reflected on the personal growth they experienced during the 18-month program, and how they came to understand the effect they can have on those around them. The skills they acquired (and perhaps the process of acquiring them) allowed them to view their jobs (the same jobs) as *new* jobs, some through the identification of strengths that contribute to the overall work environment, others through their new found abilities to better deal with others within that environment. As one participant put it, "Well, at least it makes me feel more comfortable letting it [uncertainty] happen rather than panic about what's going on."

The recognition that understanding "what's going on" is a significant step forward within the same institutional setting represents the recognition that uncertainty is *normal*. This recognition served as a source of empowerment for many participants. Not only have they recognized that effecting change within HTC is possible, they have taken it upon themselves to begin the process. Where before many participants felt wed to the organization and powerless within it, now many find themselves reaching beyond HTC for professional and personal fulfillment. Changes in attitudes, not changes in latitudes, resulted from employees' participation in the

MHR program, and these changes are important for both employees and HTC, creating a stronger, more creative organization.

Expectations, Conflicts and Change

There are limitations as well as benefits to workplace education programs, and providers of these programs must be aware of the sources of both to best meet the needs of their clients. Although constraints placed on the MHR program growing out of cultural discontinuities between the corporation and the university threatened to inhibit learners' outcomes, the conflict itself was a learning experience. While the "learning community" as it was planned never materialized, a different kind of learning milieu emerged. This conflict milieu set up the dialectic of experience through which participants grew in their understanding of themselves, of HTC in particular, and of organizational life in general.

The administrators and planners of workplace programs should be aware that the learning process is as valuable as course content, and that they, like the participants in this program, must learn to deal with ambiguity in that process. One way is to view conflict (cultural discontinuity) as an instructional tool, an experience central to teaching and learning.

A Methodological Note

Data for this study were gathered through one-on-one interviews with eight participants in the MHR program, each of whom had participated (with 10 others) in a focus group held at the mid-point of this program to assess participants' perceptions of it. Transcripts of the interviews were analyzed using a kind of discourse analysis[5] which revealed the themes which accounted for most of the participants' statements.

Endnotes

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SERVING CORPORATE NEEDS THROUGH PARTNERSHIP MODELS: THE HOOD-GENERAL ELECTRIC INFORMATION SERVICES GRADUATE PROGRAM IN COMPUTER SCIENCE

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Hood College Graduate School and General Electric Information Services (GEIS) have formed a partnership that leads to a Master of Science degree in Computer Science for participants in the Edison Engineering and Hench Scholars Program designed for General Electric employees. The partnership combines corporate on-site engineering development programs and graduate offerings in Computer and Information Systems. This program results in a masters degree after three years of participation in both sets of offerings. The thesis meets Hood's academic standards as well as GEIS's business needs. Hood has received a "Friend of Edison and Hench" (FOEH) award from GEIS for work with the company on the development of this partnership.

The corporate-higher education partnership between Hood College Graduate School and General Electric Information Services (GEIS) provides graduate education leading to a Master of Science degree in Computer Science for employees of GEIS. The program is designed specifically to serve participants in the General Electric sponsored Edison Engineering and Hench Scholars Programs.

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Edison Engineering and Hench Scholars Program

The Edison Engineering Program is a General Electric (GE) corporate entry-level training program for new hires into GE businesses. The program is run at 22 GE locations around the United States, including General Electric Information Services in Rockville, Maryland. The educational curriculum at each location is specifically tailored to the needs of the operating business. The Rockville location also offers a variant of the Edison program for its current employees called the Hench Scholars Program. GEIS inaugurated both programs in Rockville in June, 1990.

The Edison Program is a two-part program composed of education and rotating work assignments. It is designed to provide an integrated work/educational entry-level experience for the best and the brightest of technical graduates hired by GE. The education portion of the program is open to selected GEIS personnel who become Hench Scholars.

Together these programs have successfully enabled GEIS to recruit and retain top quality technical personnel and to put that talent to work in the service of the larger goals of the business. This success would not have been possible without the educational partnership forged with Hood College. Hood's joint planning and implementation of the program have resulted in a strong academic program that creatively incorporates real business issues and problems. Working with Hood faculty, GEIS has created an educational curriculum for the programs that afford the opportunity to revitalize the technical community on an on-going basis which benefits the business as a whole. For GEIS, it has provided an on-going pipeline for new technical talent; for employees, it offers an exciting opportunity for personal and professional challenge and growth.

The goal of the GEIS programs is to produce technical leaders for business. GEIS materials indicate that the goal of this program will be to produce individuals who combine technical expertise with leadership skills to move colleagues, groups, or an organization in a direction he or she identifies. The corporation reports that "these people are heard and have impact because of the technical and leadership skills they have acquired and demonstrated."

Hood College Graduate Program in Computer and Information Sciences

The structure of the masters program in Computer and Information Science at Hood is so compatible with the goals of the GEIS Edison and Hench programs that one might think it was designed for that purpose. Indirectly, that is in fact the case. Prior to Hood's partnership with GEIS, the Master of Science program in Computer and Information Sciences was designed to be responsive to the educational needs of technological industries in the Frederick and Washington, D.C. area. The program provides graduate level professional development in computer science for students entering or already employed in applied computing environments.

Since its inception in 1984, the program has been sensitive to the constraints experienced by students who are working full-time, and it incorporates flexible scheduling and requirements to ensure that students may realistically complete a degree on a part-time basis. One of its features is that all courses are offered in the evening after 6:00 p.m., and faculty are responsive to the complications created by business travel and other professional activities on the part of students.

The curriculum structure and content are consistent with the program's mission. The underlying philosophy of the curriculum is to place emphasis on understanding basic concepts and their application to problem solving. Students are prepared to be practitioners creating applications in a real-world environment, not theoretical researchers.

The GEIS-Hood Partnership

When Hood was approached by GEIS to discuss development of a partnership leading to a Master of Science degree for GEIS employees, the task was to merge two established programs in a way that would meld both portions of the educational program that employees participated in at the corporate site and on the college campus. The task was to find areas of communality in the goals, objectives, and, lastly, between the curricula of the two programs.

The particular program developed by GEIS for its employees has three parts: A, B, and C, known as the GEIS Advanced Course in Computing. Technical Education, the "A" Course, has been designed to provide an educational framework that will give theoretical context for practical experience. GEIS believes that this course offers the best of what is available in academia, on the job, and in corporate training programs. The objective of this first year of classes is to produce highly trained and motivated technical leaders who can synthesize the technical knowledge acquired in the classroom with the Engineering "Best Practices" which they have learned both on the job and in corporate training programs.

The "A" Course is approximately 38 weeks of intensive technical training, taught on-site by a combination of internal GEIS instructors and college faculty. The GEIS-Hood partnership develops instruction evaluation of this course. Topics covered include: software engineering, computer architecture, operating systems, network connectivity, database management, programming languages, and user interface. Nine hours of graduate course credits in Hood's graduate computer science program are awarded for this portion of the program. Hood faculty are active consultants and faculty for this portion of the program.

A key feature of this portion of the course is a series of "real-life" business homework problems and projects developed by GEIS engineers and engineers at other GE locations. These problems are based on the kinds of real-life problems encountered and solved by GE engineers in the past. Solutions to these problems are expected to involve 20+ hours per week and are considered one of the most characteristic features of the "A" course and a significant contributor to the "eliteness" of the program. Projects involve solution of various problems of current importance to the business.

Business Training, the "B" Course, involves a series of 8-10 courses of 1-3 days each dealing with various aspects of GE Information Services. These courses are business-specific and are taught on-site by GEIS personnel. The goal is to expose students to all aspects of the GEIS business from Sales to Marketing to Core Products and Applications.

Non-Technical Training. Throughout the program, Edison program members will continue to refine non-technical skills by taking courses on Effective Presentations, Effective Communications, Project Leadership, and Decision-Making.

Continuing Graduate Education, the "C" Course, refers to the remaining graduate level education necessary for the student to complete the Master of Science degree. During the second and third years of both programs, students have the option of continuing their pursuit of an advanced degree at Hood. This requires that students take approximately 6 credits per semester in the second year in order to stay on track in their degree program.

The Edison and Hench scholars at GEIS have generally completed an undergraduate computer science major and exempt Hood's program prerequisites. As part of the "C" Course, the students complete Hood's Master of Science program which includes systems analysis and software engineering, which are part of the "A" Course of the GEIS Advanced Course sequence. Thus the students begin the GEIS Advanced Course program and the Hood Master of Science program simultaneously and complete a significant portion of each during the first summer.

One additional segment of the Advanced Course program corresponds to Hood's elective course in Data Communications and Network Architectures; students receive three credits for satisfactorily completing it. Although Hood graduate programs are limited to six transfer credits, we grant a total of nine for this first year of GEIS advanced course study because it is regarded as Hood graduate work. Hood faculty review the syllabi, texts, and other course materials and the department participates in the selection of the instructors. One member of the faculty serves as coordinator and academic advisor to the GEIS students. The faculty member also participates in instruction at GEIS.

As one option for the capstone to the Hood Master of Science program, students must complete a six-credit software engineering project or thesis. The software engineering project requires the use of software engineering analysis and design methods to develop a substantive applications package. The thesis may be based on investigation and analysis of a practical, rather than a purely theoretical, problem. Again, Hood's requirement meshes with the GEIS requirement for a culminating project of direct value to the corporation. The faculty coordinator serves as the on-campus thesis or project advisor and monitors progress to ensure that the work meets academic standards. As with any thesis or project, the student must defend the work before a committee, composed in this instance of persons from both Hood and GEIS.

Thus a total of fifteen credits, or half of the student's program, may be received for work completed as part of the Edison or Hench Programs at GEIS. The additional Hood credits (six core and nine elective) to complete the degree are normally taken during the second (middle) year of the program.

Conclusion

The success of the partnership began with fundamentally compatible programs. The key features of Hood's program in Computer and Information Sciences involve emphasis on applications and problem solving. The Edison and Hench programs demand commitment to conceptual as well as practical learning. This compatibility enables Hood to grant credit towards the Master of Science degree without changing program requirements or compromising quality. The flexibility of course offerings enable GEIS employees to fully participate in both sets of offerings.

GEIS reports that the program is not for everyone. The program is demanding in terms of time and commitment to challenging assignments. The emphasis is on excellence. For its part, Hood College has received a FRIEND OF EDISON AND HENCH award from GEIS for its work with the company to develop this partnership that serves GEIS employees. The admiration between corporation and college is mutual. Hood finds the partnership an excellent opportunity for its faculty to be intimately involved with a world leader in information systems. And, of course, the calibre of GEIS employee that finds her or his way to Hood to study, enhances Hood's graduate student population with technical expertise and real world experience. The partnership results in a winning situation for all involved.

FORGING NEW RELATIONSHIPS: PRIOR LEARNING ASSESSMENT AND CORPORATE/COLLEGE COLLABORATION

Michael J. Kiskis

Corporate and academic cultures often clash when they collaborate on educational programs. One reason is their contrasting approaches to defining and verifying learning: corporate culture prizes learning when it is connected to experience; the academy emphasizes ideas and relies on process. Assessment of prior learning can play a vital role in bridging the two cultures: it helps students understand what they know and helps them build an integrated program of study. If we hope to develop truly collaborative programs, we must break the academic prejudice against experiential learning and help students design meaningful programs of study that build on their foundation knowledge. Empire State College's Forum program is one example of how prior learning assessment benefits both corporate and academic organizations.

Collaborative programs between corporations and colleges have become a focal point for energetic discussion over the elasticity of educational needs and the rigidity of traditionally designed curricula. The discussion has focused on three issues: whether institutions of higher education should consciously tailor their curricula to the explicit needs of corporations or to those needs that arise within the workforce; whether the academic institution's responsibility to its students is similar to its responsibility to their employers; and whether the academic assumption that it is difficult to convince corporation bound students to move beyond utilitarian notions of training is accurate or whether it is merely one of the myths that has been responsible for the wedge separating academic and corporate worlds. These issues are important and serve as the background for my discussion of one such program - Empire State College's Forum program.

Let us begin by locating Forum within a broader context. Traditional programs have contributed to the separation of corporate and academic worlds by

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widening the gap between theory and practice. While these programs offer a full range of topics, they also lock students into a curriculum that is tightly designed to address the institution's concept of foundation study and progression. This curriculum is shaped most often not by the external requirements of a specific audience but by the training and critical approaches represented within the faculty. Education is seen as something that is passed on to students in a specific sequence, in specific doses, and in specific (classroom) environments. Learning is localized and controlled. There is little or no regard for learning gained in other venues, especially if that learning has been connected to job-related training. Essentially, students are caught in a clash between cultures. The corporate culture prizes experience, clear goals, and measurable outcomes; the academic prizes its own emphasis on ideas and on process.

This clash is highlighted when academic and business institutions form partnerships aimed at increasing the overall quality of the workforce. At the heart of that clash is the academy's emphasis on theoretical foundations which often leads to contradictory notions of what kinds of study and/or training will best meet the needs of corporations and students. Academic programs often focus on increasingly specialized forms of knowledge (for example, a clearly defined line running from an introduction to management theory to increasingly focused study of managing human, technological, or industry-specific resources); however, the corporation demands basic abilities to communicate in a variety of formats (this focus is becoming increasingly popular; for example, Boston College has seen an increase in the number of business students opting for a liberal arts minor). Increased emphasis on literacy and numeracy skills along with growing appreciation for cross-cultural sensitivity sends students clear messages regarding the value and importance of continued study. Where that study takes place and how it is controlled can result in a split between corporate and academic planners.

One way to bridge the chasm that develops between the two cultures is to acknowledge, verify, and award credit for learning students gain through their work experience. This learning can form the basis for the general direction of an academic program as well as for identifying individual topics for in-house training or university study. It ultimately supports the basic concern for learning that is at the center of academic programs. Assessment of that learning, however, is neither quickly established nor easily accomplished since definitions of learning are often contradictory: corporate cultures value learning gained through experience; academic cultures may vaguely acknowledge that learning (faculty often praise experienced students because they bring a broader frame of reference to discussions), but they are often completely unwilling to allow students to incorporate prior learning into a program leading to a degree. At best, they allow only a token number of credits to be claimed. This can result in turning students away at the very time that they have found new interest in and incentive for academic study.

Academic institutions that value experiential learning are better positioned to bridge the two cultures. Empire State College has awarded credit for prior learning since its beginning in 1971. Since the first days of the college, all students have been able to request credit for learning gained through their experience. The source for that learning was not an issue - students routinely requested and received credit for learning tied to their corporate experience. Because of the college's emphasis on individualized instruction, however, there was no deliberate effort to fashion programs that would cater to the corporate manager (historical and social contexts also played a role since the early 70s were not especially enthusiastic about corporate ties to education). As the college matured, it has explored ways to maintain the energy of individualized instruction for students. It has also included more opportunities for students to work in small and informal groups. Within the last five years, ESC has devoted substantial energy and resources to programs aimed at corporate audiences. These efforts have been blended in our Forum program.

ESC has three separate programs that use the Forum designation: one is attached to the Niagara Frontier Center in Buffalo; two are within the North Central Center and are housed in Syracuse and Saratoga Springs. While I will focus on our program in Saratoga Springs, all of the programs share the same purpose: the program is designed to forge a partnership between the college and a variety of corporations (both for profit and not-for-profit) by making it possible for employees to complete degrees in a range of management-related topics. Corporations, in fact, sponsor employees (sponsorship is usually connected with a reimbursement policy that helps students meet the fee for the program). The academic program is arranged around a series of residencies (3 within a 24 week term) and relies on a mix of guided independent study and distance learning strategies (telephone and computer exchanges are both encouraged and common). During residencies, students come together in study groups guided by faculty tutors and meet with their mentor (a hybrid of academic specialist, teacher, and advisor) about their progress toward their degree.

As in the rest of Empire State College, each Forum student develops a degree plan that reflects his or her personal and professional goals (done in a study titled educational planning). The degree plan is a composite of prior learning gained from other institutions (transcript) and experience (credit by evaluation) and of learning to be pursued in learning contracts developed with guidance from ESC faculty. The evaluation of prior learning is a pivotal section - students are able to gain (at times substantial) credit for their prior learning. They identify that learning with the aid of their mentor and the center's assessment office and are advised how to incorporate the credit they gain into their degree plans (they may request up to 40 credits as part of an associate degree; 96 credits for a baccalaureate). Clearly prior learning is a vital part of their overall educational plan: academically, it helps them define goals and focus future study; from a utilitarian perspective, it allows them to move through the program more quickly. For many of our students, credit by evaluation is the most important aspect of the planning process. It is also the piece that proves the most challenging to students, employers, faculty, and administrators.

The challenge is how to balance the many and often contradictory demands of the program's participants. Theoretically, the driving force behind and within the program is the students' demand for a quality product, a product that will increase their value not only to themselves but to their present or future employer. This combination muddies the outlook, especially since value is so subjective and situationally defined; for example, while increased self worth may ultimately translate into a more confident employee, a new level of awareness might also challenge the corporate status quo. Also, in a system were outcomes are prized, subtle changes in self esteem and awareness may be too well hidden to demonstrate any immediate quantitative or qualitative change in behavior or performance. A final (and usually unspoken) issue is the potential for an employee to move out of the company once he or she gains new and marketable credentials.

These inherent conflicts suggest that it is likely that corporations would hope to play a major role in the development of the program's curriculum, that there may, in fact, be too much at stake for them not to. The reality is, however, that the shape of the curriculum is controlled by the internal demands that develop as students and mentors design degree plans (those studies that appear most frequently in student plans are offered more often) and by the availability of teaching faculty. To a large extent, the basic direction students follow in their studies is controlled by the topics that are integrated into the term schedule. This basic core has a clear impact on the choices students make as they tailor their degree program (often because students gravitate to the support network that is part of the dynamic of the study group). The system remains open to advice and suggestion (we are, in fact, actively recruiting corporate representatives for an advisory board), but it runs on internally generated requests for instruction.

While the self-definition of and self-reliance within the program can be a major source of pride for faculty and administrators, it also presents real issues when students enter the program with a substantial amount of prior learning. While that learning may not overlap with the core areas taught, a tension develops when students begin to design associate or baccalaureate programs in which upwards of 75 or 80% of the credits focus on a major field. The challenge is to develop an instructional program that offers a mix of topics from a variety of disciplines and to link those several perspectives to help strengthen the students' understanding of the worlds they inhabit (social, political, economic, scientific, and aesthetic). There can be a collision of contrasting and completing cultures as students try to shape their educational plan to conform to corporate or academic expectations.

All of this has a direct bearing on how the program sells itself. One of the easiest strategies is to focus on those topics identified by students and corporations. While at its most energetic this may seem crass and ultimately destructive, there is much to be said for opening up a curriculum to those topics that are intensely interesting to the potential customer. The confusion starts when program developers depend exclusively on market surveys. This leads to a myopic vision of the program and has the potential to limit it so that it becomes a simple extension of job-related training. Go too far along this path and the academic program loses its identity. At its most severe, this may lead employers to wonder how the college-run program is different from in-house efforts to improve job-related skills and abilities. Students may ask the same question. In fact, they become especially sensitive to any duplication because of the investment they make. They may still be willing to pay for the atmosphere of the program, but they will soon begin to realize that something is missing.

One way to decide what is missing is to use prior learning to map the educational terrain. By helping students identify the learning they have gained before entering the program, we give them a clearer set of academic choices as well as a deeper understanding of how their profession is built upon a foundation of knowledge. That foundation is uncovered as students reflect on their learning and work with evaluators to place their learning in context. This process can be more effective when we acknowledge our institutional limitations. And this leads to our look at the Forum/east program in Saratoga.

Many students who have entered our Forum/east program bring a substantial amount of prior learning (computers and their operating systems, basic management and supervision are among the more common topics). Because of the distribution of faculty specialties within ESC, we are forced to locate and train evaluators from outside the institution (my home center, for example, has only two full-time faculty in business). This calls for a heavy reliance on individuals connected to other institutions or, as is most often the case, to corporate operations. This allows students to work with specialists within their profession rather than with academics who often have only a surface familiarity with corporate environments.

This arrangement has worked well in the past. We have collected resumes from interested individuals and have been able to rely on a core group to evaluate a full range of learning. Forum/east, however, presents additional demands on the evaluation system: the number of requests for credit from prior learning is increasing; a new set of learnings need to be evaluated. With an influx of 70 new students in its first year, Forum/east will most likely generate requests totalling approximately 2,000 credits as this group of students moves through educational planning. While all these requests will not arrive simultaneously (and not all will result in individual evaluation), they do promise to place a heavy burden on the assessment process. This challenge is amplified by the fact that 52 of the 70 students are from one company - New York Telephone. That has implications not only for the care and maintenance of the program in general but for the clear identification and assessment of learning gained from a series of corporate training programs. It also calls our attention back to the potential clash between corporate and academic cultures.

One way to begin to deal with this sizable challenge would be to simply evaluate all training courses or programs for credit. This would take a good deal of work, but it would also result in clear-cut credit recommendations. One obstacle is the amount of time it would take to develop that information (it would effectively shut down the system). Besides, several students needed to know how they can pull credits together into a degree program in this first term. Others will need the information in the coming term. We simply did not have the time for a general review. It was also clear that the college could neither fund nor staff the full-scale review necessary to verify college-level learning. Resources are simply not available. The most logical approach, therefore, was to identify training that has already been evaluated through the American Council on Education or the Program on Non-Collegiate Sponsored Instruction. Once that was done, we needed to develop a sound approach to the individual evaluation of student learning. We also needed help to understand the nature of the training and how the various pieces fit together.

To begin our work, Dr. Michael Fortunato and I met with Mr. James Dobis, associate director of New York Telephone's Upstate Technical Training Center. This first meeting was held at Mr. Dobis' office and was aimed at explaining the college, its philosophy and operation, and Forum's place in the institution. Once we had established this common ground, we decided to focus our attention on how we could identify the training that our students completed. Fortunately, New York Telephone maintains records on employee training, and we were able to get a full printout of the specific courses and training sessions that each student attended. The information-gathering stage of the project went very smoothly.

Our next step was to begin to batch training courses into manageable groups. We decided to establish umbrella categories of learning based on the focus of the training courses so that we would then be able to use the training history to guide students toward an evaluator who would be able to review their learning and, in the end, recommend credit. In two subsequent meetings, which were held at my office in Saratoga Springs, we worked through one student's very extensive (2 page) training history and, based on the content of the training, set up a series of thirteen umbrella categories:

Management Theory
Labor Relations
Management Skills
Problem Solving
Safety Issues
Training
Applied Behavioral Science
Leadership
Rationalization (FMP)
Supervision
Computer Applications
Communications (oral/written)
Technology (industry specific)

These general categories will help mentors guide students as they gather the materials needed to formulate credit requests. They have already allowed us to identify potential evaluators from our immediate pool so that we will be prepared when more students move ahead into educational planning. This level of cooperation has not only made this single task a great deal easier but has also established a serious and cordial working relationship.

We have also found that we will have to work even closer as we begin to review credit requests connected to learning in telecommunications technology. A substantial portion of that learning is related to technologies developed within the telecommunications industry. Because of that intimate relationship between industry and technology, our search for expert evaluators has led us back to the specialists within the corporation. This is where the academic institution and the corporation must articulate clear expectations and establish clear rules of engagement. This is where we find the most direct contact between cultures. The collision has been softened by ESC's guiding philosophy that learning is defined by the display of knowledge not the location in which it was gained. Defining college-level learning remains as one of the more difficult discussions we will have as we review training in highly skilled specialties.

All of these efforts are aimed at bringing students to a clearer sense of how they can use their prior learning as the basis for extending their expertise and expanding their options. When we give students a very clear description of the learning they already possess (which is the basic intention behind each evaluation of prior learning), they are very likely to search for new learning. There are always students who insist that their goal is to become increasingly adept at what they already do. We will not alter every student's notion of education. We have found, however, that while the first response of many returning students is to focus on familiar topics, there is often a moment when they look at the range of learning they have and decide that it is time to move on. And they very often move on to explore unfamiliar territory, whether they look for a new professional focus or a fresh collection of disciplinary approaches. The fact that students extend themselves also affects employers. Combining prior learning with carefully designed plans for new learning makes it clear that individually crafted programs of study are ultimately more useful because they integrate a wider range of learning than is possible from a loosely connected collection of topics.

Programs that seek to take advantage of the potential in this blend of prior and planned learning must exhibit a firm control over the academic tendency to dismiss learning that is gained outside the academy. Educators also need to gain a sense of perspective about our role as guides through intellectual paths and thickets rather than continue to think of ourselves as keepers of the flame. And we must keep on guard against our own panic in difficult budget times. Programs tied to corporate sponsorship offer potential financial gain for an institution from increased enrollments. They have become more seductive as colleges and programs face massive budget problems and restructuring. The temptation is to sell a custom-designed program, a tailored fit. We should steer clear of using demographics and surveys and polls to establish the curriculum. We must be deliberate in our efforts to use prior learning as the centerpiece for programs that address the educational needs of corporate employees (in any profession). Above all, we must acknowledge and then break the prejudice against experiential learning so that we can use prior learning assessment to help students design programs of study that will help them adapt to changing work and cultural environments.

UNDERSTANDING THE POLITICS OF NONTRADITIONAL/INTERDISCIPLINARY EDUCATION

THE POLITICS OF TRADITIONAL INTERDISCIPLINARY PROGRAMS: A CASE STUDY IN HOME ECONOMICS

Karen E. Craig

The role of interdisciplinary perspectives in the development of solutions for the complex problems of contemporary society cannot be underestimated. Important issues of society today benefit from multiple perspectives. Concurrently, multiple perspectives in curricula affect students' ability to perform in professional roles. The singular perspective may create more problems than are solved. Both professions and society suffer from the inability of specialists from different professional perspectives to connect and work with each other on significant complex problems in society whether they be research, service or public policy. Factors in acceptance of home economics programs will focus on both potential and problems and on successful development, implementation and support of the programs.

What is true of discrimination against people in society also occurs with academic programs. Programs which are unfamiliar or not understood are seen as poor quality or as less desirable. Hence, interdisciplinary programs are perceived as shallow and the result of second-rate minds. They are not seen as science applied in a different way to the critical issues of society whether it be through research, service or instructional activities that create professionals with a different perspective.

C.P. Snow characterized disciplines as representing a continuum (1986, p. 4). At one end of the continuum are the literary intellectuals and at the other end are the scientists, and in particular the physical scientists. Each discipline has different attitudes and finds it difficult to share a common ground with other disciplines. Between the two there is a gulf of mutual incomprehension and sometimes hostility and dislike; nearly always this reflects a lack of respect and understanding.

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A second classification creates a hierarchy of four categories of disciplines: hard-pure, the pure sciences; soft-pure, the humanities or social sciences; hard-applied, the technologies; and, soft-applied, the applied social sciences (Kuh and Whitt, 1988, pp. 81-82). Categorization as a hierarchy reinforces the idea of lesser merit of some programs. The inherent values associated with hard, soft or pure reinforce the lesser value of anything which is not hard and pure science. In particular, interdisciplinary programs in the academy are seen as soft-applied programs. Home economics is often characterized as an applied social science and thus of less merit.

These conceptual perceptions of the various disciplines result in the respective parts of the academy having distorted images of other parts. With distorted images and the attitudes of the basic disciplines toward each other, misinformation is the basis for judgment and action. Interdisciplinary or multidisciplinary programs of an applied nature are characterized as being less valid academic fields, and they are perceived to be at the margin of the mission of the college or university.

Home Economics as an Interdisciplinary Program

Interdisciplinary programs are designed to bring together the science and methodology of several disciplines to develop expertise or design solutions to problems present in the society. The concern or problem becomes the common basis for action, not the methodology or science of a particular discipline. As such these programs are mission oriented and are useful only so long as they are addressing contemporary needs in society. To continue to be valid, they must evolve and change along with society.

Programs in home economics bring together people with disciplinary training in economics, psychology, sociology, the physical sciences, the arts, and the humanities to analyze the problems associated with individuals in the context of the family, and the family in the context of the greater society. The goal is to integrate the basic disciplines to bring a holistic perspective to the problems that individuals and families face as they develop and maintain their economic, physical and psychosocial well-being through the functions of daily living that contribute to the desired quality of life. From the beginning, home economics has been concerned with the application of scientific knowledge to the perennial practical problems of home and family life for the purpose of improving the quality of life for individuals, families and society.

The subject matter areas within home economics -- family and consumer economics, family life education, early childhood education, dietetics, fashion merchandising, interior design, food service management, apparel design and home economics education -- are necessarily interdisciplinary, or perhaps multidisciplinary in the sense that they bring together people with different ways of thinking to analyze common subjects (Shepard, 1984). For the diverse home economics professional programs, the common component is not the common subject or a unifying methodology, but a focus on the interaction of the individual and family with the greater society, economy and culture as that affects the quality of life.

The focus of some home economics efforts is development of products -- food, clothing, and housing -- that meet the needs of individuals and families as consumers and contribute to their economic, physical and psychosocial well-being. Other home economics efforts focus on the provision of services -- child and elder care, marriage and family therapy, financial counseling, or other efforts which help families interact with the larger society and economy. The basic disciplines which support these programs differ. For example, financial counseling would rely heavily on economics and psychology while family therapy would rely on psychology and sociology.

The field of home economics encompasses both diversity and unity. It is not a single discipline, but an interdisciplinary field. The programs are interdisciplinary in nature but require the use of specialized knowledge in a holistic way. Professionals are asked to view humans and their near environment as an integrated whole, mutually influencing each other (Bubolz and Sontag, 1988). The proper field for home economics research ranges from problems of the family to problems that affect the family. Home economics scholarship is not anything or everything pertaining to food, clothing, equipment, or any other commodity or service the family uses. For example, fiber and polymer chemistry, textile engineering, textile finishing, apparel manufacturing and production, distribution and merchandising are not the focus of work in clothing. Home economics does not study all aspects of the food chain, but only those aspects that impact on the physical, economic, and psychosocial well-being of individuals and families. We do not study all aspects of the economy, the market place, or the investment industry; rather, we focus on the family as a consuming unit, the goals and values of that unit as it decides on allocation of resources to achieve family goals.

The end-goal benefits from multiplicity in methodological approach that integrates parts and provides synergy to create alternative methodologies which more adequately serve that end-goal. Some high priority areas of interdisciplinary work in land grant colleges and universities today include water quality, economic development, women's studies, multicultural centers, food safety, and environmental studies. These reflect all aspects of the programming in a land grant institution -- instructional, research, and service programs.

Curricula are built on a sound foundation in basic disciplines and/or general education which provides the basis for special areas of focus, often called specializations within the interdisciplinary program. Within the focus areas, there is opportunity for depth. Baccalaureate-degreed individuals may have a beginning job title that closely parallels the specialization, but they bring to that specialization an understanding of the interdisciplinary nature of home economics and the ability to synthesize information to create alternatives and solutions to emerging problems. Using economics terminology, within home economics as a multidisciplinary program, a dietitian is not the same as a family life educator. Perfect substitution is not possible.

Positive Aspects of Interdisciplinary Programs

The importance of multiple perspectives continues to grow in a rapidly changing and complex world. It is apparent that there is a need for more tolerance of different ideas. Tolerance is essential, but it is important that the variety of perspectives include collaboration and true teamwork in approaches to the problems of contemporary society. In the complex society and world of today, no one alternative or methodological approach can be all-inclusive and responsive to problems affecting well-being of people.

Crowell (1989) characterizes current university education as limited "general, liberal" education, with preference for technical and specialized education. He questions many of our current curricular and instructional practices in higher education today that ". . . convey to students a world of knowledge unrelated to meaning and world in which outcome is independent of process" (1989, p. 60). Thus, he advocates that all constituent parts of curriculum must be more interrelated and must focus on multidisciplinary studies. This has been the history of home economics, and it can serve other interdisciplinary curricula as well.

Persons educated with great intensity in a narrow area have depth in one methodological perspective and often only communicate effectively with others using the same methodological perspective or language. This perpetuates circular thinking and isolates the discipline group from ideas that are not part of the ideology on which the discipline relies to interpret events and actions in the society. In isolation it is more difficult to take appropriate action using the findings of the physical sciences, or appreciating the understanding of mankind to be gleaned from the arts and humanities. This is a serious constraint on creative, intellectual and normal daily living which can lead to interpretation of the past wrongly, to misjudging the present and to denial of our hopes of the future. As a worst case scenario, solutions could be narrow, partial in contrast to holistic, and reflect individual disciplines, not the broad range of perspectives in the academy. The result is a disservice to society.

The reality is that many professors and administrators value specialization and sneer at interdisciplinary work. McCloskey (1991) feels they lack understanding of basic concepts of economic theory. Economists would say that following the market for one's standards, or using a single disciplinary methodology and thought process, is the strategy of a follower, not an entrepreneur. According to McCloskey, "intellectual trade is the use of other people's work for our own enlightenment" (McCloskey, 1991, p. 10). If we read and use each other's work and let it affect and influence our own, we are following the economic model of free trade in ideas.

This creates "conjunctive knowledge in that it draws from several basic disciplines and uses these garnered concepts and principles together" (East, 1980, p. 177). The integrative nature of conjunctive knowledge creates a meta-perspective for the problems which can be addressed by interdisciplinary programs. This doesn't discount specialization, but advocates trading information and ideas. Differences in perspective are the basis for serious discussion and the discovery of new alternatives and can provide stimulus to development of critical thinking and solutions to crucial problems.

Factors Deterring Long-Term Success

There are many factors that affect the long-term success of interdisciplinary programs. They have two dimensions: cultural perspectives of the program and relative power.

Evolving Mission

Interdisciplinary programs focus on problems and issues. Thus, they are constantly changing to address more specifically those issues. If they last for 90 years, as has been the case for home economics, it is crucial that the mission and focus change to reflect the society and its values, technology and needs. The greatest difficulty is that the image and understanding people have of the program often reflect their most recent contact with the program. In the case of home economics, the junior or senior high school experience is the one they ascribe to higher education home economics. This distortion creates further basis for devaluing the program.

Distinct Culture

As we have discussed earlier, there are distinct cultures associated with disciplines and their methodology and approach to science. Thus, when people representing various disciplines work together they not only must bridge the differences in methodology and philosophy but must also overcome overt criticism from the basic disciplines. Both subcultures and the perception of hierarchical value for disciplines deter acceptance of and advocacy for interdisciplinary programs. Subcultures on campus, or schisms in disciplines begin when members cluster themselves on the basis of different disciplines, methodology or approach to science (Kuh and Whitt, 1988, p. 51). Antagonism may become so intense that members of the two camps stop talking to each other and delimit their interaction based on scorn; relationships based on scorn are likely to be stressful and as such are less productive.

Pure scientists have been unwilling to "accept applied science and have not recognized that many of the problems addressed by interdisciplinary efforts are as intellectually stimulating as pure problems and that many of the solutions are as satisfying and beautiful . . . the instinct has been to take it for granted that applied sciences are an occupation for second-rate minds" (Snow, 1986, p. 32).

Negative attitudes of people also prevail in the process of working together. Sometimes faculty are hired into interdisciplinary programs without understanding the culture. For them it takes time to develop respect for the work and methodology of others. Turnover in faculty requires time to help new members develop respect and support for the process and the outcomes to be achieved by the interdisciplinary work.

Perceived Ambiguity

The degree to which people acknowledge differences in position, role, power, and responsibility -- the hierarchy of the academy -- creates difficulties in acknowledging the real contribution of multidisciplinary or interdisciplinary programs (Kuh and Whitt, 1988, p. 105). At the heart of acceptance or lack of acceptance may be ambiguity. Interdisciplinary programs may be ambiguous to group members (or students) and are nearly always ambiguous to the external world. The greater the diversity in philosophical or methodological base, the more negotiation must occur if interdisciplinary programs are to succeed.

Acceptance of the concept that the multiple perspectives are valid when looking at a problem and that perspectives are relational and interconnected is essential to success for students, faculty and the relevant administrators. This requires a high degree of tolerance for ambiguity. Sophistication in understanding the strengths and weaknesses of the respective disciplines reduces discomfort with ambiguity. A metaphor used by Kuh and Whitt (1988, p. 106) for the ambiguity associated with programs or institutional culture is that of a web which reflects a complex network of relationships that lack clarity and focus for the institution as a whole, but which create a strong mechanism or net to support the goals of the interdisciplinary work.

Faculty Perceptions

A fourth factor which discourages participation in the interdisciplinary programs is faculty perception of how they will fare in the reward system. Faculty may feel that their work will not be acknowledged by peers in the evaluation of activities and productivity in the promotion and tenure process. In some cases, the peers who know best the value of faculty contributions are not associated with the academic unit reviewing the promotion and tenure papers, and so the most relevant evaluations of faculty work do not occur. This puts increasing responsibility on the department chair or head, dean, or vice president to articulate the value of interdisciplinary work to committees, peers and other administrators. Some administrators are unwilling or unable to do this.

The essence of the problem may derive from chauvinistic attitudes of one or more groups toward other groups. Discipline orientations select different expectations of acceptable productivity that may not be consistent with the other disciplines in the academy.

Institutional Culture

Another factor deterring interdisciplinary programs may be policies which are driven by institutional culture. These may denigrate the integrity and worth of certain groups in the same way that norms, language and routine practices may be debilitating for one or more groups of people. Women or people of color are examples. Norms may deny the true worth of interdisciplinary programs (Kuh and Whitt, 1988, p. 100). Administrators may increase or withhold resources from units or salaries of persons in units that are valued in different ways because of inherent bias in policies that support the basic disciplines within the academy more readily than they support interdisciplinary programs.

Periods of Stress

Differences in philosophy and approach of disciplines surface in periods of resource reduction and program reduction or elimination. Interdisciplinary programs are at particular risk in periods of stress because of changing expectations. When expectations are unclear or changing, greater stress is present and people tend to pull back and rely on those things and ideas with which they are most familiar. Two conditions which increase stress are a changing resource base and changing leadership or instability in leadership.

In periods of resource or program reduction, the "basic" disciplines are normally protected as "essential" to the mission of the institution. Multidisciplinary programs are often targeted for reduction. Several factors are cited: the program is no longer viable; the program can be reduced substantially or eliminated and the faculty and students can go to the basic disciplines; the unit is primarily a research (or an instructional) unit; the program quality is at the margin and it can be deleted; the program doesn't have national recognition; or the program does not have peer constituencies in other colleges and universities. Another aspect of the reality is that because there are diverse faculty to be supported -- physical sciences, social sciences and humanities -- lay constituencies may not be able to marshal the support to "save" the program. Furthermore, the constituency that comes forth to support the program is often outside the higher education community with limited capacity to intervene in a meaningful way.

The selection process for leadership in higher education fosters the status quo. It continues to emphasize exemplary scholarship which is normally defined as a strong research program with some concern for teaching; emphasis on leadership occurs only when the other two are in place. Leaders who are from the basic discipline research-scholar mode typically reward faculty performance which is consistent with the disciplinary not interdisciplinary perspective. It is interesting to note that persons with applied discipline or interdisciplinary backgrounds may be devalued in the search process because of devaluing of interdisciplinary work.

Conclusions

Ironically, descriptions of exemplary colleges in the next decade are projected to be different. Faculty will be willing to share information. Faculty will collaborate with groups on campus but also with business, industry and government in the larger society. Faculty and administrators will minimize the hierarchial distinctions between teaching and research and between the sciences, the literary and interdisciplinary programs (Kuh and Whitt, 1988).

In the meantime, interdisciplinary programs must compete with traditional disciplines that have a resource base developed in an era which rewarded specialized instruction and research. Changes in the university culture must occur which create greater sensitivity and appreciation for the role of interdisciplinary programs in solving the needs of society. At the same time, the next ten years are likely to be characterized by declining resources, increased costs, and increased accountability -- all of which increase stress felt by faculty and administrators. This will be a particularly difficult problem for public institutions.

None the less, the importance of interdisciplinary approaches to the problems of a rapidly changing, global and complex society cannot be denied. The public is demanding more of higher education as a part of the solution to problems in economic development, revised social programs, and as an impetus to change in education from kindergarten through higher education among others. Unfortunately, this expectation occurs in a period of unstable resources. It is imperative that faculty and administrators with courage and conviction pursue interdisciplinary programs -- research, instructional or service -- in an effort to design solutions for society.

Awareness of the nature of the distrust between disciplines and academic interdisciplinary fields and concentrated efforts to minimize these disparities can change the culture of higher education and concurrently meet the needs of society more effectively. Knowledge of factors which discourage success of interdisciplinary programs can provide direction in the development of the programs.

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STUDENT SERVICE AS A POLITICAL VOICE

Kerrissa J. Heffernan

Much of the research on students and service addresses issues of powerlessness they feel in their daily lives. Students speak of a lack of preparation for the real world, a lack of understanding of simple democratic processes and feelings of helplessness in the face of mounting social problems. In contrast, my research investigated the dimensions of service that empower students. The students, in my study, sought an alternative forum to discover a public voice that was both representative and inclusive of community needs. Community service provided an opportunity for students to participate more fully in the public realm. Through their experiences, students were better prepared to address social problems and gained an awareness of the interrelationship of community and government structures.

Service learning is often promoted as experiential education that develops the moral, intellectual and civic skills of students. This position is often based upon assumptions we have about the students life experiences. We tend to invoke the norm of social responsibility as a justification for service and infer that through service students will become more altruistic. When service is presented only as a safe, apolitical approach to community involvement, we do the field of service learning a great injustice and rob ourselves of hard fought cultural and social gains. An understanding and acknowledgement of the role each of us plays as beneficiary and victim allow us to develop a fuller vision of community and connection.

In the fall of 1990, I began a research study on the motives of university students who participate in community service. Part of that research examined the students' views of civic responsibility and its relationship to their service. The sample consisted of twenty-five student volunteers from seven Boston area colleges. The students ranged in age from 18 to 30 years of age and served a minimum of 4.7 hours per week. The sample included sixteen females and nine males. Thirteen of the subjects were white, three of the students were black, the remaining nine students

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represented a range of racial and ethnic backgrounds. Perhaps most importantly the students represented a range of socio-economic backgrounds.

In designing the interview format I was fortunate enough to run a pilot project in 1989. From that study I revised the instrument to be less structured and less imposing. In an effort to increase the reliability of the instrument, I sent copies of the questionnaire to a number of individuals working in the area of volunteer recruitment, orientation and research. The revised interview format moved from general discussions about the students' service to questions regarding the students' family, religious and educational background. The questionnaire then moved to the students views' of activism, utilitarian benefits of service and the students' role in the community. Finally, the interview addressed areas of civic responsibility. The students were asked to discuss their views of a historical "tradition" of volunteerism, of a good citizen, of public life and the common good. These topics emerged over and over in the pilot project and I chose to frame them more explicitly for this research.

Throughout the interviews the students spoke freely about their service experiences, often sharing very intimate details of their lives. However, they struggled with the questions about civic life. The students often could not answer the question and responded with "I don't know" or they often retreated into cynicism, disclaiming any connection to a "political system that does not represent them." The students tended to view politics as divisive and stifling.

While the students struggled with articulating the public realm they recognized that their service often aids the community in having a public voice. I believe, through their service the students sought alternative ways to find a voice, a voice that was representative and inclusive of the community needs. Perhaps more importantly these students were inclined to define their politics as action. As an MIT student related, "I grew up in Oklahoma, midwestern . . . very nice people . . . and midwestern attitudes about the world . . . thinking that the U.S. was basically, a nice place to be and that the government was nice to the extent that we weren't doing anything that was worse than what anyone else was doing . . . and then I got introduced to people like Noam Chomsky, who really changed my mind . . . and exposed me to a lot of facts about the world that I didn't know before . . . It really shattered my world view and made me have to build a new one . . . and part of that new world view is having to integrate politics into my life . . . and that's how I got involved [in service] in college."

Tradition

Twenty-one (84%) of the students in this study believe that the United States has a historical tradition of service. The students who believe that Americans possess a tradition of service articulated specific imagery, such as the volunteer soldier, barn raising, civil rights activists and volunteers in a soup kitchen. These students equate the tradition of service with "traditional values" and discussed the small community where "people know their neighbor and help each other." This community was often spoken of in almost mythical terms and was usually "somewhere in the Midwest." Only two of the students discussed having participated in such a community. These students described growing up in close communities where neighbors knew each other, spoke with each other and shared common interests. One student grew up in a rural farming community in the northeast, and one student described her adolescence in a close ethnic community in New Orleans.

Two students (8%) do not believe there is a tradition of service in the United States and two students were unsure. The students who felt Americans do not possess a tradition of service believed that service is relative to individuals and to time. They did not believe Americans hold service as a constant as they do with other traditions.

The students who were unsure as to the tradition of service felt that the American definition of service is vague and the interpretations of service, skewed accordingly. "There is a tradition for [service] and against [service] I guess. George Bush touched some real chord in people when he said '1,000 points of light,' and 'what we need is not more government interference, we need more private interest.' Be nice to your neighbor and stuff. There is a funny individual tradition which, simultaneously, says 'don't have big bureaucratic programs; yeah, I do have a responsibility to help my neighbor.' On the other hand, that tradition is not the only one going, there's also a tradition of ignore your neighbor, who cares, . . . it all depends upon what circle of American society you're talking about."

Eight of the students who believed Americans possess a tradition of service felt this was a negative attribute and that as a nation, our vision of service tends to be imposing our values on others. Many of the students involved in service in urban communities felt very strongly about the negative effects of outside interference. They were convinced that true service involved consensus building and consulting the community on all decisions. In addition, these students felt the emphasis was on charity and not equality and that service is often espoused by the government to achieve dubious ends. "If there is a tradition," one student said, "I think it isn't a particularly good thing. I think for most people it means a way to spend five hours or three hours a week and you don't have a guilty conscience . . . volunteering becomes an excuse for America not doing anything . . . like 1000 points of light."

Citizenship

The students were also asked to define a good citizen, and asked if they believed their service prepared them for active citizenship. Three (12%) of the students articulated specific duties a citizen is responsible for: voting and abiding by laws. Fourteen (56%) of the students believed that a good citizen is obligated to serve the community. This might include being active in local politics or social services, being aware of potential needs, speaking out, or knowing your neighbors. Two (8%) of the students felt that successful citizenship is tied to a sound value system and that a good citizen is a good person -- honest, caring, empathetic and just. Two (8%) of the students believed that the good citizen is one who can combine self-interest with service to the community. Three (12%) of the students believed a good citizen is concerned with justice and is willing to work for change. One student (4%) believed the good citizen contributes within his or her means, and "that may be raising just and productive children."

Three (12%) of the students felt the phrase "good citizen" was relative. As one student asked, "What is a good citizen? That's so relative to the framework you choose to look at the problem . . . a good citizen would be someone who . . . I wish our educational system would change the aspects of what it means to give back to the system, to participate within the system. People think if they're recycling or giving their old clothes to the homeless shelter they're being good citizens, and in some respects, they are, but our educational system doesn't encourage linkage. I love this line by Kip Tiernan: 'You give to the poor and you're a saint, you ask why there are poor and you're a communist.' It's easy to do the bit, the band-aid, as opposed to really understanding the root of the problem and so, if you're understanding the root of the problem, people won't see you as a good citizen . . . you're rooting around too much. Why are you trying to disturb the equilibrium? But I think social change comes at many levels and I think people who are willing to give in a charitable way, whether time or money, that's important. But I'm concerned, it's important to take a step further and say why are these existing? They're all so linked. A good citizen, in my perspective, is someone who really does try and challenge some of the accepted views . . . really wants to do something about it."

Although all of the students believed that citizenship requires some level of political understanding, their feelings varied on how much political interaction a citizen is responsible for demonstrating. "I don't know . . . I think there is room for people to do a lot of different things," a political science student stated. "The minimum is having an understanding, having a story about politics . . . a story about how decisions that affect your life are being made . . . and how you have an input into that decision. I think being a good citizen is going to things like . . . well at MIT, it's hard to be a good citizen . . . there's no such thing as a New England town meeting, where you can talk to other citizens and decide what you want to happen in your life and their lives. To be a good citizen, you need to have some input into the rules and things that affect you. You need to build trust with other citizens, to build community. As far as service goes, there are things that need to be done in a society, like jury duty, and people who need to be cared for, like handicapped people, and citizens need to be willing to realize that these are services that they benefit from, like taxes. They have to be willing to say, 'this is what I have to put in.' But I don't know, 'citizen' is such an alien concept to what is possible right now. A citizen is someone from Athenian democracy or Rousseauian small community . . . people who get off work and actually talk to each other, and decide things for the community. We're so far away from that . . . I don't know what someone who wanted to be a good citizen would do."

While the students felt it was important to be politically aware, their own involvement was mixed and all but a few felt overwhelmed by the political process. The students had a particularly negative view of politicians and felt our current political system breeds corruption. The students tended to believe that the values required for active citizenship -- dialogue, honesty, a concern for justice and equity, empathy and a commitment to serve -- were incompatible with contemporary political practice.

In addition, the students had a great deal of cynicism for politics on the local, state and national level. In service, the students found the venue to participate and connect with a community and maintain their ethics and values. The students in this study often lacked a consensus on the language of civic responsibility, yet they understood that a working democracy requires respect, tolerance and understanding of different opinions and ideals.

The participants valued an opportunity to speak with others, to see a range of arguments and experiences. Instead of promoting truthful evaluation of issues, these students tended to view current political debate as weak and driven by personality conflicts and consumer standards. As one of the students explained, "A good citizen? It makes more sense to talk about a good society. I mean, a good citizen is one who fights and makes sure that his society is a fair one, and is truthful, and does what it is supposed to do for all its citizens." Students have very limited experiences with democracy.

In fact, democracy is an abstract concept to most Americans. These students do not envision the political process as an answer to social ills. On the contrary, they tended to view the political arena as contributing to a number of social ills and, at best, an obstacle in their service.

In a sense, the students in this study serve in order to become members of a community wherein service is their political action. A student tutor in an urban program explains, "I'm not criticizing the teachers in the school system, but in a way, the fact I'm coming in is saying 'you're not able to get the job done.' The fact volunteers have to, or want to . . . the fact it's necessary, means these improvements need to be done. I make a point just by coming in."

Public Life

It is important to note that while many of the students could articulate some of the complex issues such as race, class and power structures that interact in their service, the majority of students were dumbstruck when asked to define "public life." Nine of the students could not answer the question and replied that while they were familiar with the phrase they did not know what it meant. Six of the students believed that public life was notoriety and that public life was the realm of entertainers and famous politicians.

The remaining ten students had a range of answers: three students felt public life is any interaction in the public sphere; two believed it to be participation in the community; one student felt public life connotes politics; one student felt it was any action outside the personal realm; one student defined it as dialogue and connection, one student described it as "being true to your convictions," and one student felt that public life is our social structure.

The inability for a common thread to emerge in this dialogue tends to support the premise of Harry Boyte (1991): "Service lacks a vocabulary that draws attention to the public world that extends beyond personal lives and local communities."

Common Good

There was also little consensus among the participants as to the existence of a common good. Five (20%) of the students were unsure and replied they could not articulate a common good. Four (16%) of the students believed that a common good is relative to the situation, the individual and the group. "I don't know if there is a common good. What's good for a homeless person on Mass. Avenue. is not what's going to be good for Lee Iacocca. So, in that sense, there's not a common good that will make everyone happy. I think there are goods that will make most people happier, like the polio vaccine or the fact that malaria is in control in industrial nations. But a lot of political things come down to struggle and balancing out interests and distributing material goods. I think what I mean is not common good, but justice, and justice is not in everyone's best interest, because a lot of people benefit from injustice."

A number of students reiterated that it is not an issue of a common good, but rather common goods. One student replied, "I think there are common goods, like a better-educated population . . . like a lack of discrimination on the basis of race or sex is a common good. Not having wild economic injustice is a common good."

Four (16%) of the students believed that the common good was helping others have some control over their environment. "To me the common good is working to address the increasing disparity around us. Despite all the economic success of the 1980s, the only people that benefitted were the few . . . and the gap of economic well-being has increased severely . . . and that's led to increasing hunger, homelessness, people without adequate health care . . . and even infant mortality. Somehow the common good is giving people the decency to have food, shelter . . . and a sense of self empowerment . . . that they have the ability to personally affect some control over their environment. That they're not helpless within a system," a student replied.

Twenty-three (92%) of the students felt the common good was linked specifically to community and a recognition of the needs of others in a local and global sense. They replied that the common good was "giving to your community," "improving the lives of others in your community," "evaluating yourself in relation to others," "a commitment to public service," or "a commitment to the golden rule or do unto others as you would have them do unto you."

Two (8%) students felt the common good was dependent upon a successful balance of public and private lives: " . . . people define things in terms of rights, like, don't invade my space, my duty is not to get in your way. And I guess I see it, being a woman, as more person-oriented. I have a duty to help you along your way. I would say I'm liberty oriented, and my attitude is very different from my roommates, my friends and even my family. It's a commitment. You really have been helped so much along the way and it's very selfish, very ignorant of you to think you did it on your own," a student explained.

Three (12%) of the students felt that the common good was equated with socialism. "Ah you're leaning towards socialism," a student laughed. "It's a balance . . . there is a stereotype of the B.U. student as wealthy, into themselves, and I think if everyone was more aware of other people and problems, and the country as a whole -- the 80s Me Decade with Trump as a hero -- that's wrong. It's a big problem, to put yourself first. People should give up when they see self-interest conflict with the common good -- swallow their pride. I see a lot of that happening: Do it. Get it done. People should step into the community and take care of it. And if it's about money, if I have a job and a homeless person doesn't, why should I give money to that person? Because it's common sense. They need it. If people see other people in need, they should help them. It's logic. You have a responsibility to help people and government should be in more of a partnership role with people and allow them to get it done," a Boston University junior explained.

Summary

The students in this study often had a difficult time articulating the public realm. They recognized that a tension exists between the rights of the private individual and the needs of the public, and struggled with the profoundly individualistic ethic that pervades American society. This often translated to an "either - or" decision for most individuals where morality becomes a purely personal affair. The students believed that a connection to the community may offer an answer or a compromise to this "either - or" dilemma. The students perceived working in the community as an opportunity to interact in the public and broaden their world views. It was in service to the community that these students found a sense of purpose and value that often eluded them in their personal lives.

Many of the students lacked the ability to connect their service to the public realm. America's cultural emphasis with the private has left its citizens without the vocabulary to discuss public affairs (Boyte, 1990). The students were embarrassed and nervous when discussing concepts like citizenship, common good and public life. They often seemed to stab at an answer or preface remarks with "I don't know," "I guess you could say," or "Some people say." I believe these preliminary remarks removed the students from responsibility for their answers.

I believe their reticence was often due to the fact that they were not well versed in the language of public affairs and were embarrassed to appear ignorant. These students felt safer retreating into cynicism and disclaiming any connection to "the political system that does not represent them." An MIT activist touched upon this feeling when discussing religion. "For the longest time I was very anti-religious," he said. "That's sort of in vogue at MIT, to be anti-religious -- a complete skeptic, to believe that science is the key to everything and that god is passé, and I bought into that for a long time. Only now am I coming to recognize any spiritual life is important. A moral life is important. So you might say I'm rediscovering religion in my own way."

I believe many of the students have similar feelings regarding politics. Unhappy with the current system and lacking credible models for political engagement, they become anti-political, skeptical and prone to seeing politics as passe. These students were often rediscovering the political through their service in the public. Without a framework or vocabulary, they often fell back on the only language they possessed -- that of the private and the individual, or popular media culture.

The interviews revealed that many of these students lacked a common vocabulary and conceptual framework in which to view their service. Instead, their views tended to be heavily influenced by popular culture. Through their experiences, many of the students became committed to public service. All of them gave a great deal of time and energy to service and represent campus volunteer organizations that provide the community with a wealth of service. Yet, an individualistic ethic was often visible, as these students often worked in isolation or in small groups, unaware of other volunteer efforts, and in fact, were sometimes critical, even contemptuous, of other students involved in public service.

These students longed for connections to community and the opportunity to explore critical social issues. While economic and social trends were narrowing the goals of their classmates, many of the students in this study were discovering, through service, connections to the public realm and the power one individual can have to affect change. Perhaps service does not make them better citizens so much as it provides them with the necessary skills to connect to the community and envision a greater social good. Community service programs in higher education can provide opportunities for students to develop the many languages they need to fully participate in a number of communities. The university has an historical mission of providing service to the community and the nation. It is a place for exploration, discovery and reflection. But this should be more than an empty exercise; it should be thought about in the context of communities and needs.

Students need credible models of political and moral engagement. They need a community to feel responsible to, communities that will demand that we acknowledge the commonalities beneath our vast differences. "The possibility of human solidarity rests on the idea of natural human identity. A society in which strangers would feel common belonging and mutual responsibility to each other depends on trust, and trust reposes in turn on the idea that beneath differences there is identity" (Ignatieff, 1984, p. 28).

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THE POLITICAL REALITIES OF GAINING SUPPORT FOR NON-TRADITIONAL PROGRAMS IN TRADITIONAL UNIVERSITIES

Richard K. Murray
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Value placed on intellectual inquiry and academic freedom may run counter to social contract theory, which forms the basis for community life outside academe. According to social contract theory, individuals subordinate their personal needs for the greater good of the community. Within the university setting it becomes difficult if not impossible to form and maintain a constituency that effectively makes and implements decisions. In effect the empowered individual has incapacitated the "liberal" organization. Modifications to classical decision theory and political decision theory yield constructs applicable to the university setting. These constructs may be valuable to non-traditional programs in building coalitions of support and gaining eventual acceptance as an integral part of the traditional university.

Introduction

As sure as death and taxes is the difficulty of implementing plans and decisions in a university. Several authors decry the existence of the political processes on campus (Donnithorne, 1992) and yet politics are a necessary reality of decision making. Some universities seem to have overcome the barriers to planning and

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decision making (Cyert, 1988; Wilson & Taylor, 1989). What constructs of classical and political theory must be adapted to improve the success rate of decision implementation within the university setting?

The Environment

A university is wonderfully different from a corporation. We in academe take pride in our differences. We view ourselves as valuing the individual above the organization. We express these values in terms like intellectual inquiry and academic freedom. To understand fully the power of these values we need to investigate the roots of our institution and our individual professional development.

Universities were, and to a great extent are, are last bastions of a cottage industry that has grown into a large organization. As such they exemplify the kinds of differences first discussed by Toennies (1957) and Weber (1946). The medieval notion of the lecturer who was paid directly by the student based on perceived value of the lecture has passed but the freedom of the individual practitioner remains. Reflect for a moment on our academic training. Members of the academy, for the most part, are rewarded for their individual contributions. One's tenure and promotion is usually based on excellence in teaching, contributions to the body of knowledge as evidenced by publications and presentations, and contributions to the university by service. All of these criteria tend to be met by performance of the individual, or very small teams of individuals. As we are valued, so we also tend to value.

To expect that we hold different values in the organizational setting is unrealistic. Our work is uniquely individual and elusive since the formation of new knowledge is primarily a mental process that can not be observed until after the formation process is complete and the result has been communicated. The result can be evaluated, but not the actual formation process. Both the formation and the evaluation processes are based on critical analysis which, when taken at face value, may be seen as cynical. Thus, we value postulations that are time tested. Think of our dissertation training . . . "never use the term 'proven.' The data supports or contraindicates the null hypothesis." As members of the academy, we question almost everything because that is our job; that is how we create knowledge.

Our stage is set for conflict. We operate as individuals, valuing inquiry, individual freedom, and we reward individual contribution within a very complex organization. The complexity of organization within the university is equal to any large business competing in our global economy. Universities are adopting the organizational characteristics of large and complex businesses. Many have even entered the global market offering international programs.

This structure is duplicated in the university's administrative organization. The usual structure of the faculty is collegial, reflecting the value realities of the academy. The concept of shared governance mirrors that of most state and federal systems of government. Like government, the university administration tends to become bureaucratic. Both administrative structures are established to carry out the will of the people. Unfortunately this will is, to say the least, dynamic. Bureaucratization becomes a defense mechanism of administrators who want stability in a system that changes daily.

A system of social contracts underlies the administration of the system. The politics of the system is the exercise of power and influence among interest groups within the populous. A substantial change of values may disrupt the social contract.

How then does all this relate to the university and its decision-making abilities? The university has two distinct decision-making systems functioning within it: the collegial faculty and the bureaucratic administration. The interface of the two is the political arena in which joint decisions are made and implemented. Yet neither group normally admits to the existence of a political arena; the faculty because it is demeaning, and the administration because it is risky.

Lacking formal recognition, the arena is not managed since it is not seen as part of anyone's job. Thus, the political arena evolves at will. Furthermore, interest groups tend to be unconstrained and may influence the organization disproportionately to their size or conviction. The real result of the unmanaged political arena and the value of the individual as expressed earlier is that one person (or a relatively small interest group) who is vocal can postpone almost any decision in the political arena.

This blocking is not necessarily malevolent. It can be undertaken for serious and well-meaning reasons, reflection or simply a question of intellectual inquiry. The effect is the same. . . a delayed decision. The faculty, intellectual by nature, tend to reflect upon and debate the issue and then lose interest in the topic before a decision is made or implemented.

Such delays encourage special interest groups who have a different agenda to postpone a decision or implementation. By merely asking provocative questions each time the issue arises, proponents are neutralized until the window of opportunity closes. Proponents who are able to deal with long time frames have an advantage.

Administrators who are used to dealing with the bureaucratic system have an additional advantage in this arena. Faculty, whose curiosity is continually stimulated by new ideas, tend to limit the energy they wish to commit to seeing any one idea come to fruition. For the faculty there are several areas, such as the classroom, the article or presentation, that are more under their personal control.

The Application

How can we alter classical and political decision theory to gain support for non-traditional programs in traditional universities? Several models have been forwarded (Fetsch, 1990; Caillods, 1989; Cooper 1985) yet they do not seem to have gained universal acceptance. The authors would like to present a process that they have used to gain acceptance of non-traditional programs in a traditional liberal arts university.

The first element is to realize that every weakness is an opportunity and, just as in judo, you can use your opponents' strengths against them. No matter how unpopular the non-traditional program appears on the surface, opposition groups are usually fragmented and do not present an organized and cohesive front against it.

Let us begin with intellectual inquiry on non-traditional programs. Usually there are a number of provocative issues involved with every program. While these may appear to be weaknesses, a good starting point is to solicit criticism and suggestions for improvement. Most faculty will be too intrigued to pass up this intellectual opportunity. By giving you advice they will identify their interests and biases. Engaging in spirited intellectual discussion or debate about one's academic field is an enjoyable pastime for most professors. During this period you can build support. The enjoyment of the process results in buy-in by the opposition as you improve the concepts of your program proposal.

To achieve coalition formation and maintenance requires a project champion (Murray, Mancino & Dinmore, 1991), and preferably a team to divide the work and build internal motivation. By creating a team, the internal motivation of the project champions was sustained and increased, as well as a division of the work. This internal motivation proved to be a key element in allowing the project champions to continue the energy level required to maintain a coalition through implementation of the project.

The project champions must now expend considerable time and energy to acquaint their colleagues with the proposed program. It is wisest to divide this work among the project champions based on their individual roles within the faculty. Needless to say, ground work must be done to develop initial faculty relationships.

Development of a coalition for the initial approval of a project is not enough. In fact, sustaining a coalition after the initial intellectual curiosity subsided is often more difficult than gaining the initial interest. In this phase the project champions must reexamine the forces of support and opposition. Unfortunately the forces of support tend to be less cohesive than the forces in opposition.

Personal experience of the authors indicates that support tends to be gained on the intellectual level while opposition tends to be on the value level. Like most other issues that come before the faculty, non-traditional projects quickly reach the point of diminishing returns in terms of the intellectual stimulation the project will provide to those faculty not directly involved, and they move on to new issues. Value-based opposition, on the other hand, may lie dormant but has the potential to resurface each time the project comes before the faculty. At the same time, project champions tend to focus on intellectual objections without adequate attention to the value-based ones.

The authors have also found that most objections stem from the traditional faculty's concern about quality and the potential they perceive for the non-traditional program to diminish their reputation by association. An effective way to neutralize this objection is to include such faculty in dialogue and design of testing mechanisms and participation in quality control programs. Participation defuses their objections in principle since they have had input. Secondly, participation in implementation of these quality control procedures brings home the level of work involved with non-traditional programs. Finally, participation allows an opportunity for bridge building and relationships to develop.

Given that advice provided by the traditional faculty participants can be implemented, it is wise to ask them to provide feedback to the full faculty. As members of the traditional faculty who have expressed concerns about the non-traditional project, they carry more credibility than the project champions. Their support is essential and will go a long way in quieting the forces of opposition, who are generally against non-traditional programs, but who have no specific issues they can use against a particular project. The traditional faculty, whose position ranges from general support to uncommitted, will tend to delegate the decision to their colleagues who participated in the project. A typical response is, "If they are satisfied, it's OK with me."

Another interesting phenomenon observed by the authors is that quality controls usually suggested by the traditional faculty are not the same as used by them. In at least one university, the non-traditional program has offered to fund a comprehensive examination of the seniors of both programs. This offer has been repeatedly declined by the traditional faculty. The accrediting agency, WASC, has suggested that a more appropriate approach might be to select a group of high quality non-traditional programs with which the non-traditional program wishes to be identified. Comparability with traditional programs may be less important than with programs which share a similar mission.

The project champions' job is not over yet, even though their project is approved and implemented. They can pave a smoother way for the next project if they regularly provide feedback to the traditional faculty about the results of the agreed upon quality control issues. This feedback provides another way to gain acceptance by the traditional faculty through recognized publication and presentations. Non-traditional programs are a fertile field for research, publication and presentation. This helps non-traditional faculty be judged by traditional standards of scholarship and brings outside recognition to the non-traditional program. External recognition almost forces internal acceptance, especially if it crosses traditional and non-traditional lines.

Finally, we must accept that there are a few people who will never accept non-traditional programs as legitimate, just as there are a few who say math and science are not part of liberal arts. It may be in the best interest of non-traditional programs to isolate these few and set them outside the main stream of faculty thinking in the university setting.

Conclusion

By understanding modifications discussed in this paper, non-traditional project champions may have a better chance of influencing the faculty and administration in favor of their proposals. The authors can not emphasize enough the energy required to develop and maintain a changing coalition through the implementation phase of the project. One result of this energy drain is that only a limited number of projects can be introduced without risking burnout of project champions. Thus, development and acceptance of a non-traditional program is a long-range proposition that lends itself to the "bologna theory". . . Take one piece at a time and with patience you will get the whole bologna.

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FROM INSTITUTIONAL MARGIN TO MAINSTREAM: AN ANALYTIC FRAMEWORK

Joseph O'Neal
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The diversity and marginality of adult degree programs are analyzed as functions of their institutional and organizational environments. Changes in those environments are evaluated in terms of the threats and opportunities they offer for mainstreaming adult degree programs.

Non-traditional programs that provide adults with higher education services leading to baccalaureate and graduate degrees have always been marginal to the higher education mainstream. Nevertheless, they have achieved considerable success in educational innovation and service to a group of formerly neglected learners. They have also achieved financial success, providing many institutions of higher education with crucial revenues in a time of shifting markets.

Organizational theory suggests innovative organizations will become increasingly isomorphic with their host institutions over time. Below, we describe current adult program diversity, account for it by exploring the nature of the field of higher education and the causes and effects of the continued diversity and marginality of adult programs, and assess both the problems and the promise posed by new pressures on higher education to more fully incorporate adult higher education into the educational mainstream.

Diversity in Adult Degree Programs

Adult degree programs (ADPs) are generally identified with several key features. They recognize the rich learning achieved by adults with evaluation of that

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learning for college credit. In their programming, they attempt to adapt the delivery of higher education services to the complex demands of adult roles and schedules. In their teaching they seek to engage the remarkable capacities of adults for independent learning and development by serving as facilitators of the learning process. Identification of these features as the "core" elements of adult higher education is, however, quite problematic. They are not universal and, when present, are organizationally and operationally implemented in highly variegated fashion.

ADPs are remarkably diverse, displaying several organizational models (Houghton and O'Neal 1989). Such programs can be free-standing public or private institutions such as Empire State, Thomas Alva Edison State University, or the Fielding Institute, or integrated within an otherwise largely traditional college or university. If integrated, a program can be centralized as a college, school, or department of the host institution, or decentralized as an office that coordinates adult admissions, recruiting, or special services such as prior learning assessment. In the latter case, most or all instructional services are provided by the traditional faculty organized in traditional departments or schools.

Each of these organizational models also displays great diversity in terms of its operational features. In curriculum, the scale ranges from a separate program for adult students to no special options for adults; from a non-traditional degree title to traditional degree titles only; from full access to majors to restricted access; and from both internal and external degrees to external or internal degrees only. Service delivery ranges from provision of flexible learning options to traditional lecture classes only; from flexible course scheduling to traditional day classes only; from distance learning only to campus courses only; from satellite campuses and on-site courses to courses on the central campus only; and from full prior learning assessment to limited or no prior learning assessment. Faculty status ranges from complete dedication to adult programs to traditional only; full-time to part-time; with full access to faculty rank and tenure to a staff or quasi-staff status. Student services range from adult-centered or adult-targeted admissions, advising, financial aid, and so forth, to traditional services only. Budgeting for adult degree programs ranges from completely autonomous to completely integrated into the host institution budget process. Finally, the free-standing or host institution can be non-profit or for-profit, accredited or non-accredited, and involved in consortia/cooperative linkages or independent of these linkages.

Marginality and Diversity

The degree of diversity described above is much greater than organizational theory might predict. For example, general organizational ecology (see Hannan and Freeman 1977; Hannan 1989) has established that selection pressures tend to produce standardization of organizational features for organizations operating and competing in the same fields. The technical requirements of production, the differential efficiency of techniques, and the survival benefits accruing to those organizations that are most efficient in satisfying market demand produce homogeneity as organizations similarly structure themselves to incorporate the most efficient techniques to avoid selection out of the field. Given that adults in the market for higher-education services are notoriously cost-benefit sensitive, we might expect these homogenizing tendencies to have prevailed among ADPs. Indeed, the general similarities which do exist among many ADPs--flexibility of service delivery, accommodation of adult learning styles, credit for prior learning--may be in part explained by their success in capturing a share of the adult market by speaking directly to the scheduling, learning, and credential needs of adult learners. However, the plethora of organizational and operational modes by which these techniques are engaged, and the absence of firmly established, consensually recognized evidence for the educational efficacy of the techniques, belie the notion that selection by efficiency has standardized adult degree programs.

That competitive selection pressures have not had more effect on ADPs is explicable in terms of the character of the educational organizations and systems in which they are embedded. Formal organizations range along a continuum from those in purely "technical" sectors to those in "institutional" sectors (Scott 1991; Powell 1991). Organizations in technical sectors are subject to market forces which reward them for effectively controlling their internal processes so that the quantity and quality of their output, and their satisfaction of market demand, is maximized; hence, standardization through selection and imitation. For organizations in institutional sectors, success and survival are more dependent on conformity to the rationalized myths, normative standards, and operational codes which prevail in their institutional environment. Higher education organizations are very nearly paradigmatic of the institutional type. Education is effected by processing students through an assemblage of ritual categories: professors, lectures, exams, grades, and curricula defined in terms of units of discipline-based credit (Meyer and Rowan 1978). Quality is reckoned, not in terms of the competency and performance of graduates as workers or citizens, but rather along scales which have little to do with teaching and learning: research grants, publications, the disciplinary prestige of faculty, the possession of Nobel Prize winners. Quality is controlled by accrediting bodies which scrutinize organizations for their conformity to the ritualized mythos. Thus, the high degree of organizational and operational standardization which defines the higher education mainstream has little to do with technical educational efficiency and much more to do with meeting culturally defined legitimacy requirements.

The organizational diversity of adult degree programs is, in part, a function of their pronounced marginality to this education mainstream. Historically and culturally, ADPs developed on the periphery of both their *organizational fields* and the specific *organizations* to which most are attached. Defining organizational fields as "those organizations that, in the aggregate, constitute a recognized area of institutional life" (DiMaggio and Powell 1991:64), we can locate ADPs within the field of organizations engaged in formalized socialization and cognitive/moral/affective development, i.e., "education," and on the overlapping margins of the large sub-fields of "adult education" on the one hand and "higher education" on the other. Adult education is itself marginal to the field of education, whose core organizations--primary and secondary schools, colleges and universities--are still culturally identified with the education of the young to adult maturity and adult social and economic roles. Moreover, the wedding of adult education to higher education has been, in most instances, not so much a matter of incorporation into as grafting onto, as even the terms describing the various organizational manifestations of adult higher education make clear: university "extension," "continuing" education, "external" degree programs, and internal "nontraditional" programs often taught by "adjunct" instruction.

Following World War II, the need to socially and economically reincorporate millions of GI's increased the demand on higher education for adult services. Institutional responses--the construction of married student housing, expansion of night school and extension, adult-targeted financial aid, and credit by examination--often simply extended a youth-based educational model in ways that partially accommodated adults. Adult degree programs represent a subsequent and more complete incorporation of "adult education" into higher education, primarily as a result of attempts to recruit adult students in a time of real or projected demographic decline in the youth market. This incorporation of nontraditional adult degree programs was problematic. With their inherent and in part market-driven emphases on college credit for experientially-based learning and competency, facilitating learning rather than professing subject matter, and flexible, rather than classroom-lecture, course delivery, ADPs often failed to conform clearly to the established myths, norms, and rituals of higher education. With no ready place for them in organizational structures defined by those myths, ADPs were incorporated on the organizational periphery.

Organizational marginality was the fate of both integrated and free-standing ADPs. When integrated into existing colleges and universities as centralized or decentralized units, ADPs tended to be grafted onto existing administrative structures for peripheral activities such as extension, continuing education, or testing services. Staffing often reflected this marginality: directors rather than deans, staff rather than faculty, advisors rather than professors. Free-standing ADPs also occupied peripheral positions, either on the funding and organizational margins of state systems of education, or, when independent and private, on the status margins of the organizational field of higher education where competition for students made the adult market niche attractive. (Top-ranked, and even middle-ranked, colleges and universities rarely felt the need to enter this niche.) Thus ghettoized, ADPs were insulated from the institutional forces--the ritualized mythos--which had long since produced the standardization of educational practice evident among the traditional departments and schools.

The impetus toward standardization is also weak in adult degree programs' other organizational field, **adult** education. In spite of its progressively more formal and widespread disciplinary institutionalization in university departments, professional organizations, national and international conferences, and academic journals, adult education remains highly amorphous (see Courtney 1989; Hake 1992). There is little accord on what is the task of adult education. Definitions range from vocational training and retraining to remediation of adult deficits to the activist facilitation of learning in the context of social reform. Efforts to specify a common methodology or practice of adult education, such as Knowles' (1970) promotion of andragogy, are primarily normative and have failed to win even nominal consensus. Moreover, adult education is far from achieving agreement on a core set of constructs and theories, as Brookfield's (1992) recent attempt to specify, not a theory, but criteria for theory development, makes clear. In consequence, the field of adult education contains no central, rationalized mythos to which adult education activities like ADPs must organizationally conform if they are to achieve legitimacy. Nor does it constitute a profession whose formal system of training ADP practitioners must undergo, and whose cognitive base they must acquire, in order to do their work. Thus, the normative pressures toward organizational isomorphism which professions promote through their imposition of standards on their members are also absent in the field of adult education, at least for those involved in ADPs (DiMaggio and Powell 1991).

Institutionalized organizations are generally characterized by a "decoupling" of activities from structures and of structural elements from each other (Meyer and Rowan 1991). This is so because attempts to control and coordinate activities can lead to organizational conflict which calls legitimacy into question. This feature of institutionalized organizations may explain the survival of ADPs in the face of the marked skepticism and outright hostility frequently visited upon both integrated and free-standing ADPs by faculty and administrators who see the ADP innovation as an heretical threat to organizational and field legitimacy. From their redoubts on the margins of decoupled organizations and systems, ADPs could resist being washed away by the mainstream as long as they attracted students and revenues, as long as they could be held out as providing a necessary service to a neglected social group, and most important, as long as they continued to receive upper-level administrative support from those in control of budgets and programs. They could also resist becoming isomorphic with mainstream education and thus denuded of much of their ability to educationally serve and empower adult learners. Today, however, changes in the field of higher education and still larger-scale social and cultural changes in U. S. society call the continued viability and independence of adult degree programs into question and present them with a contradictory set of threats and opportunities.

Threats and Opportunities in an Era of Change

The marginality and diversity of adult degree programs places them at jeopardy in the current environment of educational change. The core of higher education itself faces increasingly strident questions of legitimacy. These questions stem from a fundamental shift in the societal view of education. As long as higher education was viewed as a service focused on individual improvement, the field was left to set its own standards through ritualization of its own myths and norms. Quality was defined in terms of a standardized process. Today, in the context of crucial and intense international economic competition in highly technical and knowledge-based markets, and vast, performance-based anxiety about the U.S. ability to meet this competition, the focus has shifted to a concern for the quality of the product of the higher education enterprise. This shift to technical rather than institutional standards of evaluation is reflected among other ways in state and federal calls for national standards, accountability, and student assessment (Ewell 1991).

The concern with graduate quality, and fitness for the new economic struggles, threatens the continued diversity of ADPs. An example, stemming from promoters of adult higher education themselves, is the recently launched CAEL-ACE Quality Assurance Initiative that will attempt to bring about greater consistency in standards and practices in prior learning assessment (CAEL News 1992). In so far as the diversity of organizational types and operational features among ADPs represents effective innovation in adult higher education, such movements toward standardization may mean real reductions in the ability of ADPs to carry out their missions.

Of course, it may be that the quality of adult degree programs would be enhanced by a greater degree of organizational and operational isomorphism among themselves as quality practices are standardized. The primary threats to their viability stem not from diversity but from marginality. In general, the response of higher education to concerns with product quality is weak on the technical side; the academy has been relatively passive in terms of developing assessment policy (Ewell 1991). However, attempts to shore up the mythos by increased standardization of ritual practice are much more vigorous. For example, and whatever its intrinsic merit, the widespread movement toward standardized "core curricula" represents an effort to make explicit in the process of education the qualities that are desired in its products. If imposed on ADPs to "insure" their quality, rigid core curricula can mean a real loss in the curricular flexibility they require. Another more direct expression of the higher education response to the concern with quality is the increasingly restrictive standards for non-traditional and external degree programs promulgated by accrediting agencies. In both cases the response is classically "institutional" with its emphasis on standardization of practice rather than evaluation of performance.

The chief threat of the institutional response is double-edged: pressure for greater isomorphism with the core of higher education will increase, but a successful effort at greater isomorphism will result in loss of mission and identity for adult degree programs. As standardization efforts at the core of higher education intensify, marginality will become more hazardous for both the adult degree program and the host institution or university system of which it is a part. Those adult degree programs most deviant from the core, and most dependent on core resources, will face the most pressure. Simultaneously, greater conformity with the core will endanger the special organizational features that most appeal to adult students; without the headcounts, FTE's, and revenues generated by those features, the *raison d'etre* of adult degree programs will be severely compromised. The ultimate threat facing an adult degree program is, of course, elimination.

What then is adult higher education to do? Accepting the fate of mainstreaming would mean the gradual loss of capability and mission. On the other hand, continued marginality seems less and less likely. The remaining alternatives are distinctly proactive. One alternative would be to call the legitimacy of the higher education core into question to legitimate adult education theories and practices as an alternative model. The danger here is that adult degree programs derive much of their own claim to legitimacy from the core, so that successful attacks on it will call their legitimacy too into question. In addition, the core usually controls funding and the faculty reward system for adult degree program personnel, and can use this control to dampen such attacks. A more positive alternative would be to demonstrate the efficacy of adult program theories and practices in producing high-quality graduates. If these products are superior to those produced by traditional programs, a proposition of whose truth most adult higher education personnel are certain, the core will face pressure to become more isomorphic with the margin. Adult degree programs additionally will be required to demonstrate cost–effectiveness, value of adult alumni, and other values dear to the hearts of administrators.

The challenges of effecting the second alternative are daunting, since it means transforming the field of higher education as a whole and capturing its symbols of legitimacy. On the positive side, transformation of the field is precisely the claim that adult higher education has maintained as part of its identity as a social movement. Some influences of adult higher education, such as the emphasis on teaching and advising as key faculty roles, the conceptualization of the teacher as facilitator, distance education, and experiential learning, have already penetrated the mainstream. In addition, some cultural and technological changes favor adult higher education practices. The proliferation of computers, for example, has increased the use of individualized instruction, and labor force changes have placed a premium upon lifelong learning and made it central to educational policy. Perhaps the greatest force for incorporation of adult higher education into the mainstream will remain the shrinking market for higher education and competition for students who vote with their feet and dollars for programs that best serve their needs.

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ASSESSMENT AND ACCEPTANCE OF INTERDISCIPLINARY CURRICULA AT CAZENOVIA COLLEGE

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Interdisciplinary upper division curricula form the basis for the transition of Cazenovia College from two-year to four-year status. The College adopted the ACT COMP instrument as a method of assessing student performance in the core curriculum competencies. Results of administration of this evaluation to the initial graduating class have proven helpful in securing acceptance of the academic validity and effectiveness of these interdisciplinary programs.

At Cazenovia College, two new interdisciplinary upper division programs constitute the foundation for the transition of the institution from two-year to four-year status. The success of these programs is vital to the College. Interdisciplinarity has and continues to face a unique challenge in gaining acceptance at Cazenovia College. Both external audiences such as evaluators from the New York State Education Department and the Middle States Association of Colleges and Schools and internal constituencies such as faculty members have expressed various degrees of skepticism, misunderstanding, discomfort with, and distrust of, interdisciplinary curricula. Since academic professional training through graduate study is strongly discipline-oriented, this phenomenon is perhaps normal and to be expected.

The specific vehicles for baccalaureate development are the B.S. in Applied Arts and Sciences and the B.P.S. in Fashion Merchandising (Ware and McLaughlin, 1987). Of these curricula, the B.S. is a closely integrated interdisciplinary program based on development of student competencies in Communications, Valuing, Problem-Solving, and Social Interaction. The B.P.S. is focused on retail management but also incorporates the four competencies as curricular objectives. Both curricula

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are "two + two" designs, intended to facilitate progress of graduates of A.A.S. degree programs to baccalaureate studies. Several new baccalaureate programs under development will also eventually draw upon these competency-based interdisciplinary courses, primarily to serve as an upper division general education core.

Acceptance and understanding of the two newly developed baccalaureate curricula are critically important for their success and for institutional transition. Academic administrators and program faculty have focused on this concern from the outset. The College is challenged not only to validate the worthiness of the interdisciplinary curricula, but in addition, to demonstrate that the faculty and students of this traditionally two-year college are, in fact, performing at upper division level. The curricula were originally developed by a relatively small number of faculty. As the enrollment increased, other faculty members heretofore experienced at teaching freshmen and sophomores began to offer some of the junior and senior courses. Other faculty members were recruited to the College who, although they had upper division teaching experience, still faced the necessity of accommodating to the interdisciplinary nature of the curricula while also adapting to the special Mission of Cazenovia College.

The College Mission stresses support for and facilitation of student learning and requires faculty members to accept the responsibility for active, even intrusive, intervention to achieve this goal. Approximately two-thirds of the entering freshmen are accepted as underprepared for college-level work; these students are required to participate in the various academic support services of the Learning Resources Center. Typically over 80% of the freshmen who do participate in these services are academically eligible to continue at the College for their sophomore year. All faculty members are expected to interact with Learning Resources Center staff on a continuing basis to assure that students in their classes make use of available assistance. Learning how to serve this student body, to accept this goal as fully legitimate, and to enjoy the satisfaction that success in this endeavor brings, requires time and effort on the part of any faculty member new to the Cazenovia College experience.

The typical entering freshman at Cazenovia College is a passive learner, lacking in self-esteem, first generation college-going, who reports on surveys that the most important goal of a college education is to "get training for employment" and the second most important is "to make friends." Eighty-five percent of the student body receives financial aid. Recognizing these well-documented facts, external reviewers question whether such students can actually achieve at the academic level usually expected of college juniors and seniors, and whether faculty members conditioned to work effectively with these students as freshmen and sophomores can refocus as faculty to set their demands and expectations appropriately at a more advanced level.

In evaluating the success of the baccalaureate programs, we have had to address the following questions:

- Are students in these upper division programs performing at normal expectations for juniors and seniors?
- Does student performance demonstrate that the interdisciplinary curricula generate increased mastery of the curriculum competencies?
- Do students understand the integrated nature of the components of the curriculum?
- Do faculty members incorporate learning experiences related to the competencies into courses effectively?

Assessment

A variety of assessment procedures have been utilized to examine the effectiveness of these interdisciplinary programs. Students are surveyed at midterm in Fall and Winter terms to solicit their level of satisfaction. Several external consultants have worked with faculty to strengthen course content related to the competencies of valuing and communications as well as to improve specialization areas (Functioning in Social Institutions, Using the Arts). These consultants observe classes, meet with faculty members as a group and individually, and provide extensive critical analysis of curriculum implementation. Student Evaluation of Teaching, the standard teaching evaluation form on campus, is conducted in each class every term. Information from these sources is used to guide course development, faculty development, and curriculum revision.

When the curricula were first being designed, the faculty recognized that quantitative instruments had to be developed to document the degree to which students achieve success in the competencies. The ACT Comprehensive Outcomes Measurement Program was selected, although not without controversy, as the first step in developing an array of assessment measures. Some faculty members were convinced that no paper-and-pencil test could properly assess student performance, others were sure that the definitions of a particular competency (valuing, problem-solving) as defined by the ACT COMP did not accurately represent that competency as taught at Cazenovia College. The ACT COMP, in fact, does not assess the competency of social interaction. As yet, we have not been able to develop an adequate comprehensive measure for this competency and our investigation of other complementary assessment measures continues.

In particular, the ACT COMP does serve to compare the achievements of graduates from our competency-based programs with similar students graduating from more traditional educational programs. We have adopted the long form of the ACT COMP which includes samples of student speaking and writing performance to obtain a performance assessment not limited by paper-and-pencil methodology. Enrollment in the B.S. and B.P.S. programs in 1991-92 totals 51 juniors and 28 seniors, so administration of the long form is feasible. Program directors administer the ACT COMP to entering juniors and to graduating seniors. Test results are scored, analyzed, and compared to data from a cohort of comparable colleges selected by ACT staff.

Results

The first group of 30 seniors graduated in May 1991. Results of administration of the ACT COMP have been received from ACT and have proven remarkable. The ACT report to the College states the following:

a. The average Cazenovia College senior scored at the 98th percentile on norms for seniors at four-year institutions. All means patterned near the top of the highest quartile.

> The fact that all means patterned near the top of the highest quartile . . . suggests that the students in this small sample were highly proficient in the general education skills and knowledge measured by COMP compared with samples of seniors in the reference group

b. Means for the senior sample patterned above means for senior samples at a group of 17 four-year private institutions having senior samples at similar entering levels of achievement. Means for the 1991 senior sample

> patterned above means for the samples in this reference group on every COMP scale, as well as near the top of the highest quartile on every scale. Compared with this reference group, therefore, (Cazenovia College) seniors performed at an extraordinarily high level of overall exiting proficiency in every COMP assessment category of general education skills and knowledge.

c. The scores of each senior were compared to the student's scores as an entering junior.

> Total score gains evidence by students ranged from 15 to 75 points . . . . An unusual amount of growth was evidenced on all scales, and statistically significant gains were shown on all scales (significant at the .001 level of confidence).

d. The growth of the Cazenovia College seniors was compared with growth over four years for senior samples from 30 other institutions that have completed longitudinal studies, a total of 2,980 seniors to date.

> The Cazenovia College sample of 28 seniors evidenced an amount of growth in Total score on the Objective Test at the very top in this distribution of mean gains. Mean gains for your sample also patterned at the top of this distribution in all COMP areas.

e. Data from the Speaking assessment were mixed. A total of 24 students (80% of the sample) had gains ranging from 2 to 17 points. However, 6 students showed losses ranging from 1 to 5 points.

f. Results of the Writing assessment give a total mean score for the Cazenovia College senior sample at the 42nd percentile compared to the 30 colleges in the reference group. Senior means in Use of Language were at the 64th percentile but patterned below the median in Audience (46th percentile) and Organization (39th percentile).

We are aware that this first graduating class is relatively small and is likely to differ from subsequent classes. These are students who chose to enter an entirely new baccalaureate program in a college which had never before offered a bachelor degree. Nevertheless, these results have been most encouraging.

The ACT COMP has provided documentation of positive change in student performance in the core competencies of the B.S. and B.P.S. interdisciplinary curricula. The data comparing performance of Cazenovia College seniors to norms from comparable colleges demonstrate that the teaching-learning environment in the B.S. and B.P.S. programs is consistent with reasonable expectations for upper division education. The results are particularly useful in addressing concerns that the academic environment at Cazenovia College, because of the particular Mission of the institution, would have a negative influence on appropriate implementation of upper division programming such that adequate academic standards would not be achieved.

Acceptance

One of the objectives of adopting the ACT COMP was to provide external validation of the interdisciplinary educational experience to external constituencies. These results were received in August, prior to the visit of the Evaluation Team from the Middle States Association in October of 1991. Evaluation Team members reacted positively to these results, specifically citing our use of the ACT COMP among other evaluation methods in the team report. We are quite sure that the data contributed to a highly favorable final report from the team. The team identified student evaluation through a variety of measures as a strength, while adding the caution that we should continue to maintain the individual assessment which they saw as contributing heavily to the success of the program.

Another external audience that we hope will find these results of significance is the New York State Department of Education. As Cazenovia College moves to implement further baccalaureate degrees, the ACT COMP results will help substantiate our claim to offering students a rigorous upper division educational experience.

Faculty reactions to the ACT COMP results are much more difficult to address since no quantitative study has been done of attitude changes since the initial results were made public. While many faculty still harbor reservations about specific aspects of the ACT COMP measure itself, the overall gain in total scores on the measure has apparently contributed to a more positive image of the new baccalaureate curricula. Those faculty engaged in designing new baccalaureate programs have in large part chosen to incorporate competency-based courses into these new curricula without challenging their educational validity and have gone on to propose additional courses that follow in the same path. Interdisciplinary courses are now incorporated into our associate degree course offerings as well. As more faculty are drawn into the planning processes for new degree programs, we anticipate a steady growth in acceptance.

One further test of the validity of interdisciplinarity remains to be fully gauged. That is the willingness of our students in associate degree programs to continue onwards into the baccalaureate programs rather than transfer to other institutions or seek employment. The ACT COMP results are one step towards convincing students that these new curricula do in fact yield the results promised by Program descriptions and brochures. While recruitment continues to be an arduous process in difficult economic and demographic circumstances, the current junior class is almost double the size of the prior entering class.

Conclusion

As we indicated at the beginning of this paper, the ACT COMP was intended to be merely the initial measure of curricular assessment. We believe that it has admirably served the purpose of supporting development of the programs. Although the positive results have been reassuring, we need to replicate these data with subsequent classes as well as to develop additional measures providing a more comprehensive assessment of curriculum outcomes. Student surveys, peer evaluations, and other formative means of assessment will continue to play important roles in the development of our curricula. Other means of assessment are also under consideration, including the use of portfolio review (Buffalo, 1992). As we graduate students, we also will have the opportunity to conduct longitudinal studies of our alumni's subsequent career and educational achievements. Even at this early point in our history as a baccalaureate institution, we can cite a high rate of managerial employment amongst our B.P.S. graduates and a diversity of achievements amongst B.S. graduates ranging from admission to graduate school to the successful beginnings of a career in computer consultancy work. The ACT COMP serves as an initial step in what is clearly an ongoing process of securing and maintaining acceptance of interdisciplinary, competency-based education as the fulcrum of our transition into a two- and four-year institution.

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